

# THE SCHOOL REVIEW

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## Educational News and Editorial Comment

### THE MODERN FOREIGN LANGUAGE STUDY

For somewhat more than a year there has been in progress a general study of modern foreign language teaching in this country. The committee in charge of this study is now issuing bulletins and tests, which are intended to stimulate teachers and students of education in all parts of the country to co-operate in the investigation. The bulletins will be sent free to anyone requesting them. The address of the Modern Foreign Language Study is 561 West 116th Street, New York City. Tests of various phases of language knowledge are being prepared. Those for French are now available and can be purchased for a nominal price.

Bulletin No. 2 is of special interest. It contains a list of 123 problems which call for investigation. The list of problems is preceded by a statement of the immediate and ultimate objectives of instruction in the modern foreign languages. The problems are grouped under the eight following headings: "Factors and Conditions in Achievement," "Problems in Testing Achievement," "Prognosis Test Problems," "Curriculum Problems," "Learning Problems," "Methods," "Transfer Values," "Organization and

Administration." The character of the problems suggested can be indicated by quoting the first ten problems under the heading "Factors and Conditions in Achievement."

1. The effect on achievement of the age at which modern foreign language is begun.
2. The effect on achievement of the method used.
3. Variations in achievement due to general intelligence.
4. Variations in achievement due to the size of the school and to differences in teaching conditions.
5. Variations in achievement in classes taught by natives and by teachers trained in America.
6. The influence of previous foreign-language study on achievement.
7. Comparative study of achievement by pupils beginning a modern foreign language in secondary school and in college.
8. The size of classes and resulting variations in achievement in foreign languages.
9. Variations in achievement in language classes meeting three, four, five, or more times weekly.
10. Comparative study of achievement in classes in which extensive reading is practiced and in classes that read less and do more formal linguistic work.

#### THE APPOINTMENT OF TEACHERS

Anyone who has had experience in school administration knows that the character and the quality of instruction in a school are very largely under the control of the officer or group of officers who appoint the teachers. In small school systems which are well organized this power is exercised by the superintendent as one of his chief functions. Even in the small systems there is very often a prostitution of the schools through the exercise of political influence. Either the board of education deprives the superintendent of the power to appoint teachers or the superintendent is intimidated by pressure so strong that he makes his selections with a view to conciliating the people on whom he depends for his salary. In the great cities, where it becomes impossible for the superintendent to deal directly with the problem of filling vacancies, there has always been a strong tendency to resort to illegitimate methods of appointing teachers.

When William Maxwell became the first superintendent of Greater New York, he had the insight to demand that he be left free to appoint the teachers through an examining board which he

could control. For years he exercised the power which this arrangement gave him and completely changed the conditions of appointment to the schools of New York. Later the board of education took the examiners out of his control.

Among its other educational troubles, Chicago is experiencing a struggle for control of the appointive power. The following article from the *Christian Science Monitor* gives an account of the situation and illustrates once more the wisdom and strength of character of Chicago's superintendent.

The merit system in the Chicago public schools is at stake in an issue raised over the reappointment of a member of its board of examiners, according to a plea made by William McAndrew, superintendent of schools, to the administration committee of the board of education.

The situation hinges on the reappointment of William H. Campbell, who has been a member of the board of examiners for thirteen years. This position is considered one of the most important in the Chicago school system, because the board of examiners is the door through which new teachers enter. It is composed of but two members and the superintendent of schools, ex officio. The law gives the superintendent the authority to appoint the examiners for a term of two years, with the approval of the board of education.

Mr. McAndrew has reappointed Mr. Campbell and is standing for his confirmation by the board of education. The president of the board, however, with another member, is resisting Mr. Campbell's continuance in office. Col. Edward B. Ellicott, the president, is quoted as saying that Mr. Campbell has been reported to him as discourteous and that the examiner has become despotic.

On the other hand, in the judgment of the superintendent of schools, publicly expressed, Mr. Campbell is efficient and honest. The superintendent has taken the position that the charges are unjust and improbable and has expressed the belief that the people who spread the rumors of Mr. Campbell's discourtesy are among those who failed to qualify for positions in the Chicago schools.

Mr. McAndrew said in comment:

"Some think that an examiner should be like a salesman in a department store, that he should aim to please all. But he is like the man who selects the merchandise of the store. If the buyer pleased all the salesmen who come to him with their wares, he would not last a month.

"Examiners pass on human material, of which the school system is built. They have to reject. We have nine hundred places to fill; three thousand people desire to fill them. We are working for the school, not for the applicants.

"This issue has been raised before in Chicago upon complaints from those who could not get favors from this examiner. If pressure can be brought to bear upon an official in this position, the whole civil-service system is vitiated.

Other large cities protect the office in a manner similar to the Chicago law. In Boston and Philadelphia the superintendent makes the appointment. In New York the power lies with the board of education, but the tenure is for life. This, of course, renders the examiner free from the pressure of those who seek personal favors.

"An examiner's tenure should be as secure as a teacher's. A teacher is not removed at the request of a complainant without a fair hearing. An examiner should certainly be as free."

#### PUBLIC HIGH SCHOOLS IN THE SOUTH

Part IV of the *Proceedings of the Association of Colleges and Secondary Schools of the Southern States* for 1925, which appeared recently, gives an interesting record of the growth of public high schools in the southern states. On page 16 there is a graph showing the number of private and public high schools accredited by the association each year since 1896.

Up to 1913 the association recognized very few public schools. Even the private schools on the approved list were very limited in number, aggregating 33 in 1912. Beginning with 1913, the numbers for successive years up to 1924 are as follows: private high schools, 36, 70, 63, 78, 75, 73, 78, 85, 100, 104, 117, and 129; public high schools, 125, 208, 245, 269, 292, 336, 365, 329, 455, 524, 589, and 625.

The impressive fact revealed by these figures is the expansion of the public high school in recent years. The figures make it clear that the traditional attitude of the South of regarding higher education as the exclusive privilege of the few is rapidly disappearing, and in its place is found an interest in popular education of a truly democratic type. It is a matter of frequent comment by those who are conversant with conditions in the South that the popular interest in an expanding educational system is growing at the same pace as is the new development of industry in that part of the United States. Better education goes hand in hand with increase in wealth, with improvement in agriculture, and with development of manufacturing enterprises. So closely related are improved economic conditions and improved schools that it is impossible to determine which is cause and which is effect.



## A YEARBOOK ON THE CURRICULUM

The Commission on the Curriculum, appointed by the Department of Superintendence, is preparing a report on the curriculum to be issued as a yearbook of the Department of Superintendence before the midwinter meeting (February, 1926). It will be remembered that the yearbook of 1925 was prepared by this commission. It contains summaries of the scientific studies which have been made in various fields of instruction, especially those belonging to the elementary school. The forthcoming volume will open with a general discussion of the purpose of the public school as an agency created and maintained to prepare pupils for the duties of life. Following this general statement, there will be reports prepared by special committees, showing the practices of public schools in various parts of the country in dealing with the various subjects taught in elementary schools and high schools. In the preparation of these reports the commission has secured the co-operation of approximately four hundred school systems, some of which have set aside the time and services of members of their teaching and supervisory staffs for the purpose of contributing to a general co-operative revision of the curriculum. The yearbook will serve not only to supply much valuable material which can be used by school systems but also to show how nation-wide co-operation in educational matters can be developed through voluntary organization in a country which is entirely lacking in central governmental control over local education.

## PRACTICAL CURRICULUM-MAKING

A monthly publication is to be issued by the Boston school system under the title, *Citizenship through Character Development*. The purpose of this publication and the source of its materials are described by the superintendent of schools in the following statement.

The primary objectives in popular education are to co-operate with the individual in the development of his physical, intellectual, and spiritual well-being and, in so doing, to prepare him for responsible service in a democracy. In the training of the child, we recognize that he possesses certain natural, inherent rights, such as life, liberty, and the pursuit of happiness. To secure these rights,

the forefathers fought obstinately every inch of the way from Bunker Hill through Valley Forge to Georgetown's glorious heights, and, when victory was secured, the battling heroes, becoming statesmen, established the Constitution to shield these inalienable rights that the Declaration of Independence had proclaimed.

Under our democratic form of government, therefore, the individual is supreme in the exercise of certain rights endowed by his Creator. It is true that these indefeasible rights of the individual antedate the state and take precedence of it, but it is equally true that these rights are the common possessions of all our fellow-citizens. They must be shared with all, respected by all. The state is collective; it is the sum total of its individual units. In a sense, the state has *character*, reflecting the qualities of its citizens. The state is moral or immoral in so far as its citizens are virtuous or otherwise.

If the citizen, therefore, is to interpret or enjoy his own inalienable rights properly, if he is to be helpful to his fellow-men, if he is to contribute to the welfare of his country, he must be influenced and controlled by lofty spiritual habits. Religious instruction is prohibited in the public schools; nevertheless, into the life of every child there should come in abundance practice in the great cardinal virtues—prudence, justice, fortitude, and temperance, together with their allied natural virtues.

The course of study in citizenship through character development, so patiently, intelligently, and effectively evolved by a committee of principals, is founded upon training and practice in these cardinal virtues. Its purpose is to develop character in the individual in the expectation that worthy citizenship will flow therefrom. This course of study has been given a place of supereminence in our daily school programs. On the whole, it has been received enthusiastically by principals and teachers. However, for the teacher in the classroom there is still need of supplementary material to vitalize and vivify the more or less skeletal outline. The bulletin, which is to be published each month during the coming school year under the editorial direction of a council of principals, which includes the members that prepared the course in citizenship, promises to be fertile in illustration, suggestion, and helpful aids for the teachers of all grades of instruction. It has wisely been determined by the council that the copy for the bulletin is to be collected and organized each month by different groups of teachers, representative of the various sections of the city. Under these circumstances the salient features of a particular teacher's program will become an inspiration and a guide to all her fellow-workers. This is the quintessence of teacher participation.

This publication is launched with the heartiest approval of the school department and with the good will and best wishes of all who are interested in character formation as a foundation of good citizenship.

This direct attack by a group of school people on the problem of providing new instructional material for the curriculum is a hopeful

sign. Too often curriculum-making consists of a conscientious, but futile, search among the traditional materials for something which can be made over to fit the new and complex conditions of modern life. The reassembling of material will never supply the new curriculum which schools are seeking. There must be fresh, timely lessons drawn from the study of American institutions. There must be a new core for the public-school curriculum. That core should be the study of social relations and of the types of individual behavior which make for co-operative living.

The Boston publication is a move in the direction of constructive education. It should inspire other school systems to join in the effort to collect new material and try it out in the schools.

#### A STUDY OF MALADJUSTMENT

The Psychological Clinic of the Ohio State University has recently published a pamphlet, entitled, *A Study of the Maladjusted College Student*, containing material which will be found very suggestive for administrative officers of high schools.

The pamphlet, which was prepared by Zoe Emily Leatherman and Edgar A. Doll, gives a brief historical summary of the efforts which have been made in many colleges to study the personal traits and academic and social relations of students. Then follows a series of analytical tables, based on the examination of many cases, showing the kinds of maladjustment which are encountered in dealing with a body of students. These general tables are supported by descriptions of typical individual case studies.

The first part of the chapter entitled, "A Study of Probable Causes of Maladjustment," may be quoted as indicating the scope and character of the inquiry.

The work of the psycho-educational clinic in the public school has brought the realization to the minds of educators that behind every problem of conduct is a cause, of which the student himself may be absolutely unaware, so that when we ask the girl who failed to pass her work why this has happened, she may with entire truthfulness answer, "I do not know." To realize this fully one must work with such cases and see how these problems, upon analysis, prove to be the result of certain common causal factors, fewer in number than the apparent complexity of the problem would lead us to expect. . . . These causes group themselves under four main headings: mental, physical, environmental, and emotional.

1. Mental causes. Marked discrepancies between the test scores of individual students in the University Intelligence Tests and their classroom records show that the factor of general intelligence is not the only one involved in academic failures. Let us examine some of the other possible factors.
  - a) Persons of the feeble-minded level of intelligence are rarely successful in reaching high school and almost never reach college. Many "inferior normal" persons actually enrol, and some of these, by continuous effort and by remaining longer than the usual four years, actually obtain degrees.
  - b) Scholastic inferiority without intelligence defect is a condition resulting in some instances from emotional disturbance, or it may be the result of—
    - (1) Premature attempts to carry advanced work
    - (2) Poorly arranged sequence of courses
    - (3) Lack of definite objective, i.e., no life-plan for which the college work is considered a more or less definite preparation
    - (4) Special disability, such as poor visual or auditory memory, arithmetical disability, or lack of "language sense"
    - (5) Poor previous preparation
  - c) Definite psychiatric condition. . . .
2. Physical causes. The relation of poor health to poor academic standing needs little comment. Gambrill says, "Not the sudden, temporary (serious illnesses), but the chronic, undetected or undiagnosed conditions of lowered vitality and discomfort" are the things that undermine college success. There are disturbances of the endocrine glands which do not cause illness in the ordinary sense in which the word is used but which interfere with the efficiency of the student's physical and mental life. Especially among women, the thyroid gland is a common cause of trouble. This is again the province of the physician. We may list the following principal physical causes.
  - a) Chronic disease or acute illness
  - b) Sensory defect (Under this heading would come defective eyesight and poor hearing.)
  - c) Motor defect—for example, speech defect or writing disability
  - d) Unhygienic living
    - (1) Insufficient sleep
    - (2) Insufficient food or badly planned meals
    - (3) Bad living conditions
    - (4) Improper clothing
    - (5) Lack of outdoor exercise
    - (6) Lack of recreation
    - (7) Slovenly personal habits
3. Environmental causes. In this group, enumeration will suffice in most instances to show the relation between the cause and the effect.
  - a) Too many outside activities
    - (1) Social

- (2) Self-support
  - (3) Helping at home (in the case of girls who live in Columbus)
  - b) Too frequent visits home.
  - c) Lack of application (This usually has subordinate causal factors.)
  - d) Inability to make proper use of time
  - e) Difficulty in adapting to the new environment (This is especially evident in the case of students whose high-school work was done in a small community.)
  - f) Bad companions
  - g) Faulty home training ("perverse trends")
  - h) Excessive parental sympathy
  - i) Lack of home encouragement
  - j) Too much spending-money
  - k) Family worries (especially the separation of parents)
4. Emotional causes. For the college student the ordinary adjustments incidental to adolescence present unusual difficulties. "He has to adjust himself to a new environment and to a new group of associates. He wishes to be well thought of by his companions, to stand well in his studies, to be prominent in college activities. He does not understand why he finds it so difficult to be his natural self, so that his sterling qualities may be recognized. He may be oversensitive to the actions of others, or he may develop a feeling of inferiority. As a result, he may lose interest in his work and play, find it hard to concentrate, become restless and worried, and develop general physical complaints." Williams has said that these experiences are common and that "there is not one of us but has his psychic scars of this period."

#### JUNIOR COLLEGES AS LOCAL INSTITUTIONS

An editorial in *School Life*, an official publication of the Bureau of Education, argues as follows for the establishment of public junior colleges:

Fifty years ago \$100,000 was enough to endow a college capable of excellent work. In this day such a sum seems insignificant in the establishment of any educational institution. On another page of this number is a description of a high-school building in New York City that cost \$3,000,000, and elsewhere is a brief reference to another in Omaha, Nebraska, that cost \$3,500,000. The New York school is designed for 5,000 students, and 3,000 were enrolled before it was completed; the Omaha school has 4,000 students.

These figures are not extraordinary, for in our age the economy of large units is recognized in educational affairs as well as in industrial and commercial concerns. So many city high school buildings erected in the past six years have cost more than \$1,000,000 that the mention of that sum no longer excites astonishment.

The question naturally arises, With such excellent equipment, why is the instruction limited to the high-school grade? Unquestionably, facilities for college work are available in every modern high-school building, and in most of them the present teaching force is fully capable of giving at least two years of college instruction. It is logically the next step for the cities to take over the work of the junior college. Many of them have already done so. Many more will do likewise when they have caught up with the demand for high schools. The majority of cities are still struggling with that problem. When they have met it reasonably well, we may confidently expect that the great universities, especially those maintained by the states, will confine themselves to advanced work, except for those students who live in their vicinity and for those for whom a residential institution is especially desirable. Junior-college work may properly be considered a local matter.

#### ALL-YEAR SESSIONS FOR HIGH SCHOOLS

All-year sessions are proposed for the high schools of Omaha, Nebraska, following the successful experience of the technical high school with the four-quarter plan. This school has been operating forty-eight weeks a year for seven years, and the plan has proved very satisfactory. A four-year class is graduated at the end of each twelve-week quarter. Bright and energetic pupils may complete the entire course in three years. The other three high schools have already adopted a summer session of eight weeks.

#### TRAINING RATHER THAN MERE SELECTION

For some years past there has been in existence an educational enterprise which was organized by the great meat-packing houses for the training of their employees. It is known as the Institute of American Meat Packers. Recently a meeting was held of the representatives of the different branches of the institute. Reports were made of the work being done at various centers, and plans for the further development of the institute were discussed.

At this meeting certain statements were made which are significant for high-school teachers and administrators because they show that industry is emerging from the stage where it selects its workers and is maturing into the stage where it recognizes the importance of technical training for the duties of a given business.

The following paragraphs are quoted from the report of the meeting published in the *Chicago Daily Tribune*.



Executives in the meat-packing business are made, not born, Philip D. Armour, grandson of a Chicago pioneer in this industry and first vice-president of Armour and Company, told members of the Institute of American Meat Packers.

Laboratory and research work, college courses, and studies in personnel are backing up the meat industry today and making it ready to meet the demands of a growing population that call for an increase of a quarter of a billion pounds of meat annually.

"The men who do the work in the packing industry, whether as laborers, skilled mechanics, salesmen, or executives, are now getting a share of the attention formerly devoted to machinery, processes, and methods," said Mr. Armour.

"The packing business demands skill and knowledge comparable with those required in any major industry. A packing house is no place for the novice. Nevertheless, we existed for years on a basis which might indicate a belief that meat packers are born and cannot be made. That is not the case.

"Successful and efficient men in every branch of our business can be developed by proper training. We have need for a great many such men. The institute plan takes cognizance of the possibilities lying in the training of personnel, and during the last year hundreds of persons, both in and out of the industry, have had access to courses of study designed to fit them for important places in the industry."

#### A PUBLICATION FOR ENGLISH TEACHERS

For the purpose of promoting the use of *Webster's New International Dictionary*, which they publish, G. & C. Merriam Company, of Springfield, Massachusetts, issue from time to time a four-page leaflet entitled, *Word Study*. The first number contains the following announcement.

#### TO THE TEACHERS OF ENGLISH

In *Word Study* the publishers hope to contribute in a modest way to a teaching of English by furnishing a medium for an interchange of ideas between those having mutual interests.

If you have worked out a plan for presenting some troublesome point in the study of English which you feel would be helpful to those meeting the same problems, we shall be glad to have you submit it for publication.

*Word Study* will be published periodically throughout the school year and will be sent without expense to any English teacher requesting it.

#### PUBLICATIONS DEALING WITH EXTRA-CURRICULAR ACTIVITIES

J. Hooper Wise, of the English Department of the University of Florida, and Joseph Roemer, of the Department of Secondary

Education in the same institution, have published a monograph entitled, *A Study of the Extra-curricular Activities in the Public High Schools of Florida*.

The authors define as follows the field which their discussions cover:

Extra-curricular activities are, in some form, as old as our educational system. The spelling bee and the Friday afternoon exercises, together with athletics in various forms, have long held forth in the schools of America. Previous to the last decade, however, such activities were carried on in a haphazard manner, were not definitely organized, and consequently had no regularly formulated plan. It is the purpose of this investigation to determine the status of extra-curricular activities in the high schools of Florida.

Closely paralleling the junior high school movement and receiving additional impetus from the report of the Commission on the Reorganization of Secondary Education, the importance of extra-curricular activities has steadily gained recognition in many of the progressive public school systems of our nation. Nowadays one seldom reads a book in the field of education or a school journal of whatsoever kind but that in thought or in matter of fact one finds clearly enunciated the principle that training for citizenship is one of the main objectives of modern education. With this change in attitude and purpose has come the realization that our schools must be more than places for the mere cramming of facts into the heads of our youth—they must be laboratories where, through the experimental process, our boys and girls are trained in the attitudes and the principles of a democracy. To attain this end, trained educators have made use of certain instinctive characteristics of pupils and by guiding them into proper channels have gradually produced what we today designate as extra-curricular activities. By extra-curricular activities, then, we mean those legitimate activities not provided for in the curriculum. They will, of course, vary in different schools.

The monograph reports experiments undertaken by the authors as well as types of organization of extra-curricular activities which they observed in Florida schools. A bibliography, drawn in part from the published material of E. K. Fretwell, of Teachers College, Columbia University, is included.

The general interest in the topic of this monograph is attested by the frequent articles in educational periodicals describing the organization of activities outside of the regular curriculum. So great is this interest that one part of the 1926 yearbook of the National Society for the Study of Education is to be devoted to a report on extra-curricular activities. L. V. Koos, of the University of Min-

nesota, is the chairman of the committee in charge of the preparation of this report. With the aid of a number of co-workers, he has collected a full statement of the various types of social, athletic, and intellectual activities which go to make up the colorful extra-classroom life of the high schools in a number of cities and towns.

#### SOCIAL GUIDANCE IN CLEVELAND HIGH SCHOOLS

A volume of 190 pages has been published by the Cleveland Teachers' Federation, 301 Leader News Building, Cleveland, Ohio, under the title, *Social Guidance in Cleveland High Schools*. This book gives an account of the practices of high schools in Cleveland in moral instruction and in social control and organization. It is full of direct, concrete descriptions of the measures adopted by different schools to guide the behavior of the pupils into proper channels.

One part of the volume reports what pupils have to say in reply to questions regarding their methods of judging their fellows and their teachers. A single group of answers may be quoted as typical of this section of the volume. The following are the replies of five pupils to the question, "What qualities enable the teacher to influence the pupil?"

*Girl, XI A, 17 years of age.*—The teacher whom I like I enjoy working for; I would do most anything for a teacher I liked. The teacher who is sociable and has a pleasant word for me is my ideal.

*Boy, XII B, 17 years of age.*—This teacher gives me a good talk almost every time I see her, and it does a good deal toward pushing me on.

*Girl, XI A, 15 years of age.*—The teacher of whom I am thinking always made me feel that she expected a great deal from me, and I felt confident that I could do and be everything she expected of me. I would do a great deal to keep from disappointing her.

*Girl, XII B, age not given.*—(Describes herself as never especially popular.) She was kind and helpful and did not make me feel unnecessary, as some of the teachers did when I lost confidence and was nervous.

*Girl, VII B, 11 years of age.*—I think this teacher helped me a great deal in being what I ought to be by talking gently, and I have got a better understanding than with a teacher who hollered.

## ADMINISTRATION OF EXTRA-CURRICULUM ACTIVITIES IN THE HIGH SCHOOL. I

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The subject of extra-curriculum activities in the high school is attracting a large amount of attention at the present time. For some years the number of articles published on the subject has been increasing. Courses devoted exclusively to this field have appeared in the curriculums of a few schools of education during the academic year. A large number of institutions include such courses in their summer offerings. Within the past twelve months the first books on the subject have appeared, and one of the 1926 yearbooks of the National Society for the Study of Education will consist entirely of studies in this field. The tendency to neglect, or to ignore the existence of, the organized group life of the school is no longer widespread. Educational authorities everywhere appear to be convinced that extra-curriculum activities have come to stay. A steadily growing appreciation of their value as a means of training pupils in the practical arts of citizenship is one of the factors which account for this conviction. A second important item is the general recognition of the fact that it is natural for high-school boys and girls to form organized groups and that they will do so whether their elders agree to it or not. Under these circumstances, the practical question for the school is how to manage the activities in such a way that they will yield the greatest amount of educational value.

This question was the subject of discussion at a recent meeting of the high-school principals' group of the Washington Education Association. The topics that were discussed seemed to center around the five following problems: (1) How can adequate time be provided for the meetings and other business of extra-curriculum activities? (2) What regulations are necessary to restrict pupils to a reasonable amount of participation? (3) How may the work of teacher sponsors be encouraged and rewarded? (4) What are the best plans for the

supervision of finances? (5) What records should be kept of pupil performance in this field? At the conclusion of the discussion a resolution was passed requesting the writer to collect information with regard to the administration of extra-curriculum activities in a large number of high schools representing the country as a whole. In response to this request, a questionnaire was prepared and mailed to approximately five hundred unselected high schools listed as members of recognized associations of colleges and secondary schools. Replies were received from 231 schools in thirty-five states. The schools range in enrolment from one hundred to thirty-seven hundred pupils. The median enrolment is 595 pupils. The following discussion is therefore concerned with the practices of the typical high school recognized by a standard accrediting association. Almost without exception, the replies to the questions were prepared with care, and a large number of principals requested a statement of the results of the investigation. The following material is presented for the purpose of satisfying these requests and for the purpose of provoking further discussion of the problems.<sup>1</sup>

#### PROVIDING TIME FOR MEETINGS AND OTHER BUSINESS

The successful functioning of organized social groups is contingent upon an adequate amount of time conveniently arranged for meetings and other business. Groups of pupils in school do not constitute exceptions to this rule. Finding time for new work in high-school programs is very difficult. The entire school day is ordinarily assigned to the subjects of study, and pupils and teachers alike are carrying full working loads. The allowance of time on teachers' schedules for the supervision of activities entails additional financial burdens. The increasing difficulty of raising funds for schools causes administrative officers to hesitate to extend recognition to exercises which require an addition to the budget. Under these conditions, it is to be expected that the authorities will be reluctant to provide adequate time for extra-curriculum activities until they are convinced that substantial educational values accrue from such activi-

<sup>1</sup> The writer wishes to acknowledge his indebtedness to Principal V. K. Froula and E. M. Stillwell, of the Roosevelt High School, Seattle, Washington, for their valuable assistance in tabulating and interpreting the data secured in this study.

ties. The amount of time, therefore, that has been provided becomes a significant index of the attitude of the responsible officers of a school toward this work.

In order to throw light on the situation, the principals of the schools which were included in this investigation were asked the following questions. "Is a part of the regular school-day schedule assigned to extra-curriculum activities? If so, how many periods a week? How long are the periods?" Practically all the schools replied that some such period is used, and four different kinds of provision were described. The first is that which assigns periods in the daily schedule to a limited number of activities constituting a small preferred group. The number of periods assigned to any one organization ranges from two a month to five a week. Their duration is ordinarily the same as that of other periods of the day. The R.O.T.C., basket-ball teams, and special gymnasium groups, with from two to five periods a week, were frequently reported in this connection, as were numerous musical organizations, such as the band, orchestra, chorus, and glee club. Literary societies, meeting during the school day from two to four times a month, were reported by several schools. A large number of debating, school-paper, annual, dramatic, and radio groups were also reported. The situation of these organizations is not greatly different from that of the subjects of study. Like the latter, they have definite places on the programs of both teachers and pupils. Pupils who wish to join find the hours of meeting already assigned, so that conflicts with other work may be avoided. Since the meetings are held during the school day, no pupil is prevented from participating because of lack of time. Likewise, the teacher who supervises the activity is favorably situated, in that no extra demand is made on his energies, and time for preparation is available. Both the teacher and the pupils are protected from the numerous interruptions which occur in the work of groups which do not enjoy this security. The existence of this kind of time provision implies a favorable and helpful attitude on the part of the administrative officers of the school. Under these conditions, the work of the protected activities prospers, and pupils may be expected to obtain the desired training values.

The position of activities which are not encouraged with definite



time assignments is not so fortunate. In a considerable number of schools the unprotected activities greatly outnumber the few that are protected. Because they cannot remain after school, many pupils are unable to attend the meetings of organizations which they would like to join. In many cases the teachers who are responsible for supervision do not have sufficient time to prepare for the work. The business of numerous organizations is either done poorly or left undone. The consequence is that only small numbers of pupils obtain the substantial educational advantages which extensive and well-organized programs of extra-curriculum activities are capable of yielding.

The second kind of time provision does not assign activities to regular periods in the daily schedule. All meetings are called by the principal at irregular intervals and at any time of the day. The duration of such meetings varies from five minutes to an entire period or even longer, depending on the nature of the business to be transacted. The hours which are selected most frequently for these occasions are the first period of the day and the first period after recess. Athletic associations, class organizations, assemblies, "pep" rallies, "drives" for various purposes, and student associations are the organizations most frequently mentioned as transacting business in this way. Serious disadvantages attend the use of this plan. Although principals call meetings of this kind at different periods and endeavor not to interrupt, to a dangerous extent, the work of the classes that are assigned to any one period, it is almost impossible to prevent abuses. Nor can all the business of these organizations be transacted efficiently in the limited time that is made available by this plan. Its most serious shortcoming, however, lies in the neglect of many organizations which require longer and regular times for meetings and which ought to be included in a comprehensive program of activities. Unless one of the other three plans is used in connection with this plan, these organizations are forced to meet after school; this means that many pupils cannot take part in them at all. It is clear, therefore, that this plan alone cannot provide the time that is needed for a well-rounded and comprehensive program.

The third kind of time provision is that which assigns to extra-curriculum work a certain period of the school day, during which

regular classes cannot be held. The number of periods which are designated for this purpose varies from one to five a week, and the range of their duration is from ten to thirty minutes. During this period the pupils may remain in their home rooms or go to other rooms where meetings are being held by organizations of which they are members. Groups of pupils are free to hold committee conferences, and the teachers may remain in their rooms or attend conferences elsewhere either with pupils or with other teachers. On account of its brief duration, this period is more favorable to activities which do not require the moving of large groups of pupils from one part of the building to another and which have business that can be carried out effectively in a short period of time. The needs of the organized home-room group are well met by this arrangement, and in many cases this period is known as the home-room hour.

Several schools gave details as to the work which may be carried on at this time. In a California high school campaigns for thrift, Near East Relief, the Red Cross, Christmas seals and Christmas cheer boxes, Thanksgiving dinners, etc., are conducted during this period. Speeches are made concerning class and school spirit by teachers and representative pupils, and patriotic discussions preceding national holidays and other special occasions, such as Burbank Day, fire-prevention day, etc., are held. Efforts are also made to improve manners and courtesy. At other schools tickets are sold for student entertainments; class and student council officers are elected; "drives" are conducted for the school paper and the annual; money is deposited in the school bank; announcements are read; and the work of the various pupil organizations is presented to new registrants. Called meetings are held by student councils, by student or athletic associations, and by class organizations. Teachers also carry on work of an advisory nature at this time. The main function of this brief period is to provide a convenient time for the transaction of that increasing volume and variety of school business that cannot be carried on effectively during the regular class meetings. It serves the purposes of a safety valve and affords relief to teachers and pupils alike. It has the advantage of adding little, if any, cost to the annual budget and entails no insurmountable administrative difficulties. In view of these facts, schools which desire

to give greater emphasis to extra-curriculum work and in which only the first or second kind of time provision now obtains can use this plan as a convenient and practicable method of accomplishing their purpose. The most serious shortcoming of the brief-period plan, however, lies in the fact that it does not make adequate provision for activities that require more than thirty minutes for the conduct of their meetings.

The fourth kind of time provision designates a certain period in the regular school day as an activities period and assigns to it an amount of time that is sufficient for the meetings of any organization, with the exception of the athletic first teams. The most important difference between this provision and the third kind of time provision is that the period of time in the fourth provision is decidedly greater than that in the third. The length of the period varies from forty to eighty minutes, and the number of periods a week ranges from one to ten. In the Lincoln High School, Kansas City, Missouri, one period of forty-five minutes is devoted to activities; this period is supplemented by a fifteen-minute period on Monday. Three fifty-minute periods a week are assigned to activities in the Morton Senior High School, Richmond, Indiana. At the North Side High School, Denver, all meetings are held during the third period, which is forty-three minutes long; pupils who are not attending a meeting are assigned to the study hall. In the Northwestern High School, Detroit, any club may meet from half-past two to four o'clock not oftener than once in two weeks. The Fremont High School, Oakland, reports that ten forty-minute periods a week are available for this purpose. In another school, where a forty-minute period each day is devoted to this work, Wednesday and Friday are designated as the days for meetings which include the entire school, such as assemblies or class organizations, student association, etc., and Monday, Tuesday, and Thursday are used for special conferences and club meetings.

Twenty-six schools reported the use of as many as three or more such periods a week. Twenty-eight schools reported one or two periods a week. The use of a larger number of periods minimizes the difficulties of schedule-making and reduces the number of conflicts between meetings. Greater percentages of the student body are

thereby enabled to participate in more than one organization. A larger number of periods is specially helpful for organizations such as glee clubs, stage forces, debating groups, journalistic staffs, radio clubs, etc., which have huge volumes of business to transact within a limited time. The larger number of periods enables a greater number of different organizations to use the special rooms and the special building equipment, such as the auditorium, stage, music room, etc. Two long periods a week would enable a large percentage of the pupils to attend the meetings of the general organizations, such as the student association, boys' club, and class organizations, to which all pupils should belong, and, in addition, the meetings of at least two departmental clubs scheduled to meet not oftener than once in two weeks. When the long-period plan includes only one or two periods a week, it may be supplemented to advantage by the time provisions of the first or third plan.

The use of the long-period plan implies a substantial amount of recognition of extra-curriculum work on the part of the authorities of the school. By its adoption, they prove their willingness to allow pupils and teachers to employ a precious part of the none-too-long school day for this work. Teachers manifest their readiness to face the difficulties of responsibility for adolescent pupils under conditions of larger freedom than that which obtains in the classroom. Principals face new complexities of schedule-making, and the board of education gives evidence of a willingness to supply any additional funds that may be needed for the new activities. Under these conditions, the program of extra-curriculum activities possesses as great an opportunity to realize its objectives as does the program of studies.

#### RESTRICTIVE REGULATIONS

The enormous expansion of extra-curriculum offerings and the great eagerness of many pupils to participate have caused more than one-half of the schools which were included in this investigation to adopt measures of restriction. Three kinds of restriction are distinguishable on the basis of the functions which they are intended to serve. The most common restrictions are those designed to protect the intellectual life of the pupil from the ill effects of a disproportionate emphasis on extra-curriculum work. In most cases the

rules prescribe simply that pupils must be passing in three subjects, passing in three-fourths of their subjects, or making marks higher than a certain percentage. The restrictions sometimes relate to the work of the previous half-term or term and sometimes to the current term. Officers of organizations or participants in major activities are frequently required to maintain higher standards of scholarship than are those who are merely members of organizations or participants in minor activities. A number of schools provide that pupils who make high marks may take part in more activities than may those who make lower marks. The University High School, Oakland, has devised an ingenious scheme for this purpose. Membership in all organizations and the official positions in these organizations are given definite point ratings. The maximum total number of activity points for which a pupil may enrol is less than twenty. The pupils' marks are graded 1, 2, 3, 4, or 5, 1 being the highest and 5 the lowest. The amount of participation which is allowed to any pupil is determined by subtracting the square of the average grade of his marks from 20. The remainder is the number of points of participation which are permitted. The exceptional pupil whose average grade is 1 may enrol for nineteen points of activity. The ordinary pupil whose average grade is 3 may participate to the extent of eleven points. Only four points of activity are allowed the poor scholar who makes an average grade of 4. The effect of this plan is to limit the participation of unsuccessful pupils to minor positions or to mere membership and to place important official responsibilities in the hands of pupils of superior scholarship.

The West Side High School, Denver, reports a clever plan, which is intended to produce effects similar to those produced by the plan of the University High School, Oakland. To be eligible for any elective or appointive position of honor in any student organization, a pupil shall have obtained for the preceding semester not less than sixty points in scholarship earned from the marks A, B, and C under the following evaluation scheme. The marks A, B, and C count five, four, and three points, respectively, for each weekly recitation period in the subjects in which the marks were earned. A mark of A in a subject which met five times a week would count twenty-five scholarship points; a mark of B in the same subject would count twenty

points; etc. Positions in student organizations are classified as major, submajor, and minor and are evaluated at forty-five, thirty, and fifteen scholarship points, respectively. A pupil may hold only one major position and as many other positions as his scholarship points will permit. Other schools gain much the same end in a less formal way by ruling that pupils with an average grade of 1 may engage in more activities than may pupils who average less than 1, provided that faculty approval is first obtained. Several schools report regulations to the effect that a pupil who is considered by one or more of his teachers as likely to fail in any subject cannot participate in a major activity without the written consent of his parents. In other cases the rules prohibit important meetings or performances during the weeks when mid-term tests or final examinations are held, and pupils may not be called from the classroom without the approval of the principal, assistant principal, or the boys' or girls' adviser. In order to facilitate the enforcement of such rules, several schools prescribe that membership or official position in any organization is subject to faculty consent and must be approved in writing.

A second group of regulations restricts participation in order that opportunity to hold important positions may be more widely distributed among the pupils. These regulations, like those of the first group, have the effect of preventing overemphasis on extra-curriculum work in the case of exceptionally active pupils. One of the most common plans is to classify organizations and official positions as major or minor and to permit pupils to take only a certain number of majors or minors or certain combinations of majors and minors. A second very popular plan is that which assigns definite point ratings to membership and official positions in all organizations and restricts the number of points which pupils may accumulate. Each of these plans rests on more or less careful efforts to estimate the value of membership and official positions in terms of the amount of pupil time and energy consumed, the burden of responsibility carried, the honor that goes with the positions in the eyes of the school, etc. A less ingenious plan, but one which is intended to accomplish the same purpose, is that which merely limits the pupil to a certain number of activities. This plan does not take cognizance of differences in organizations nor even of the difference between member-



ship and the official positions. The number of permitted activities varies from one to four. In several schools the restriction is put into effect by provisions which permit meetings to be held only at certain hours and which allow pupils to join only such organizations as they can attend. Seniors are permitted to take part in more activities than are underclassmen, for the reasons that they are ordinarily better prepared for responsible positions and that the senior year is the last opportunity which they have to obtain experience of this kind. Several schools do not permit a pupil to succeed himself in an important office or to resign an office which he has held as long as one month in order to accept another.

A third set of regulations is intended to prevent ineffective work or waste of time. A very large number of schools require that teacher advisers be present at all meetings and at all important committee conferences. In some cases advisers are required to call off meetings for which no program has been prepared in advance. One school will not permit a pupil to drop out of one organization and join another of the same classification during any one semester. This regulation is designed to encourage pupils, once they have joined an organization, to make earnest efforts to do good work in it. There are cases, however, when it may be best for the pupil and for the organization as well for him to resign and join another. The first choice of an adolescent pupil is not always wise; therefore, this restriction should not be invoked until a careful investigation of the case has been made. Several schools have regulations which prohibit the holding of important official positions by pupils who have not been members of the school for a definite minimum time, such as one semester or one year.

*[To be concluded]*

## AN ANALYSIS OF VOCATIONAL INTERESTS

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In a critical, but sympathetic, discussion of vocational guidance G. M. Moore has forcibly expressed the feeling of antagonism which he senses both outside and inside of academic circles. He says:

Vocational guidance aims at and doubtless at times does secure more intelligent choice, but its inspiration is based on the vision of an adviser who does not and cannot fully comprehend another's personal equations and reactions, and *who cannot possibly eliminate his own*. He, therefore, if he be wise, dare not predict, and he has no right to prescribe. . . .

If there be a "divinity that shapes our ends," as the older generation was taught, then the office of vocational adviser should be very sacred and very deferential. Is it so conceived? Our reading seems to indicate that it is not. We sometimes wonder if a new *Schrecklichkeit*, even more appalling than the old, threatens our youngsters in the shape of an academic superstate, which shall test and measure and classify youthful intelligence, prescribe its mental regimen, book the victim for this or that vocation, circumscribe his aspirations, and finally nail him down on his predetermined job.<sup>1</sup>

Vocational counselors may not admit that any such popular prejudice is justified. The criticism should, however, make them cautious about guidance procedures. The warning was more pointedly expressed by Frank M. Leavitt, of Pittsburgh, when he said that "counseling is not fortune-telling." This warning cannot be repeated too often, since there is always the temptation for counselors to tell youths the vocations which they should enter. The blank for the analysis of work interests which is to be discussed in this article is not to be used for telling fortunes. Although a boy or girl may find his good fortune through its use, it is devised especially to guard against counseling which is of the prescriptive sort.

An evening spent with the men of the chamber of commerce of a suburb of Pittsburgh suggested that there is a real need for a person to connect his start in a vocation with an analysis of his own inter-

<sup>1</sup> G. M. Moore, "Vocational Guidance," *What the Colleges Are Doing* (January, 1925). Boston: Ginn & Co.

ests. The majority of the men present that evening had gone into their life-occupations mainly because of outside inducements rather than because the jobs offered opportunities to follow up their work interests. Of seventy men who have been carefully questioned by the writer at different times, forty-five stated that they had entered their life-work mainly because a job in the particular field had been offered and not because the job gave them an opportunity to follow up their own vocational interests.

A second criticism of the present guidance program is its over-emphasis on the placement problem. Moore says:

The mind of this generation, as it seems to the critics of vocational guidance, is already too much centered on its job and too little on the man who is to hold the job. Largely this may be due to the fact that vocational enthusiasm is bringing the job altogether too far to the front in our educational program. Remotely it is due to strenuous economic conditions in general. Vocationalism in all its aspects is a representative symptom of a congested civilization, which, within bounds, is conceded to be both justified and wise, but which, out of bounds, becomes only the more hectic symptom of an overhasty economic urge, and as such is in danger of doing mischief.<sup>1</sup>

Such comments as this should make counselors consider whether they should not pay more attention to the young person's problems of self-analysis. Should not a larger portion of their procedures and their research be devoted to questions of analysis of human interests? There need be no fear of encouraging hyperintrospection on the part of adolescents or college students. They seem to have instinctively a wholesome "objective-mindedness," which protects them from overindulgence in thought about themselves—or about anything else, for that matter.

For some time it has been known that adolescence is the proper time for self-analysis of vocational interests if the analysis is to function at the most critical time in vocational selection. More than ten years ago this was made clear to the writer by his vocational census of 1,340 undergraduate students in the academic college at the University of Minnesota.<sup>2</sup> The faculty was of the opinion that few college students have chosen their vocations. Nearly two-thirds of the undergraduates in this census were women, and yet it turned

<sup>1</sup> G. M. Moore, *op. cit.*

<sup>2</sup> James Burt Miner, "A Vocational Census of College Students," *Educational Review*, L (September, 1915), 144-65.

out that two-thirds of the entire group had made what seemed to them their selections of life-occupations before they started their college courses. The high-school age is certainly the time to begin studying one's life-interests. The importance of this analysis before college age is further indicated by the fact that only a quarter of the college men included in this study were planning to follow the vocations of their fathers.

With this need so apparent, the writer undertook to prepare a blank which might be of some service to high-school pupils in assuming the difficult task of studying themselves in relation to their life-work. After a trial of the method in 1918 with approximately ten thousand pupils in the Pittsburgh high schools, the blank was informally called to the attention of the National Vocational Guidance Association at its meeting in 1920 in Chicago. In 1922 an article<sup>1</sup> was published which described various features of the blank as shown by a tabulation of the results in Pittsburgh. As a result of that study, a revised form of the blank was prepared and is now available. The continued interest manifested has been a pleasant surprise. Approximately twenty-eight thousand copies of the blank have been used. More than a hundred inquiries have reached the writer personally. They have come from as distant centers as Norway, Germany, Great Britain, and the Hawaiian Islands, and from coast to coast and from North to South in this country. The sources of these inquiries are not without significance, since they show the various groups interested in the problem. They include not only city and county superintendents and directors of vocational guidance but also state departments of education and of home economics, trade schools, high schools for girls, colleges of liberal arts, teachers' colleges, technical colleges, agricultural colleges, the Y.M.C.A. and the Y.M.H.A., public and private employment offices, the employment offices of industrial and commercial establishments, the federal veterans' bureau, psychological institutes, and various research organizations. It is especially pleasing to note that the blank has encouraged some counselors to adapt parts of the plan to their own situations. It is to be hoped that they will continue to improve it.

<sup>1</sup> J. B. Miner, "An Aid to the Analysis of Vocational Interests," *Journal of Educational Research*, V (April, 1922), 311-23.

Whether or not counselors use some of the methods of this blank, it is worth while to consider the legitimate purposes of such a blank. To begin with, certain purposes may be rejected which are not within its field. The main purpose of the blank is not to gather statistical data. It was not devised with that end in view. Moreover, the blank is not planned as a test of vocational interests. The chief purpose, the fundamental reason for the blank, is set forth in bold-faced type in the first line: "The purpose of this blank is to help to discover special interests and abilities by suggesting how to observe one's own likes and dislikes." The emphasis is on *how* to observe.

The blank is far from perfect in showing how this self-analysis of vocational interests may best be carried out. It is frankly experimental. Certain of its features, which many vocational counselors use in one form or another, do function in assisting youths to study their work interests. The blank requires, for example, that the individual shall record the occupations of his parents and those of friends which have interested him. It requires also that he shall more specifically record all occupations in which he has tried himself out for more than a month. These are to be considered in relation both to the features about the work which he liked and to those which he disliked. Again, it asks the individual to consider any office which he has held or any honor, responsibility, or opportunity for leadership which he has had. No other question in the blank seems to be as important for mature individuals. It was success in responsibilities previously held which counted most in placing the men in the army in their most promising fields of activity. Of less importance is the consideration of interests in high-school subjects of study and in activities, recreational or otherwise, carried on outside of school.

Whether the other features of the blank assist a person in finding himself vocationally will be considered more at length. They are more novel and still debatable. They include the selection of first, second, and third choices among groups of work activities which seem to represent groups of similar human interests; a list of vocational-interest contrasts; and, finally, of very subordinate importance, a list of intellectual, emotional, and volitional human traits which may conceivably be related to vocational success in different lines but which have not yet been found to indicate qualifications for

special vocations as distinct from qualifications desirable for nearly all vocations.

The feature of the blank which seems to be most directly related to the title of this article has to do with the grouping of similar interests into a tentative classification of twenty-two types of vocational interest. Among these types the individual using the blank is to indicate his first three choices. The object is thus to narrow his indecision to three lines, which are to be kept in mind for further selection. This feature was a new method when the blank was first tried. It aimed to depart from the classification of occupations worked out by the Bureau of the Census of the United States, the classification which is most commonly used. The objection to the Census classification, as then stated, was that it "is hardly serviceable in training the pupil to approach the problem by observation of his own experiences. . . . [It] fails to reach various distinctions in types of vocational interests found among high-school pupils."<sup>1</sup> The grouping which is suggested attempts to call the individual's attention to "more fundamental work habits and interests which allow opportunity for special aptitudes and give promise of the most permanent satisfactions in a life-work."<sup>2</sup> The most important fact about this venture of a classification which would function in the lives of individuals was that it seemed to work. High-school pupils were thus able to narrow their ranges of choice. Moreover, each of the twenty-two types tapped the vocational interests of at least some high-school pupils. Only two of them were included in less than 3 per cent of 1,319 records which were selected at random and tabulated, and none of them were included in more than 12 per cent of the records. A place was left for any field of activity not on the list. Less than 3 per cent of the pupils specified interests which were not covered by the classification.

Table I gives the distribution of approximately three hundred first, second, and third choices of work interests among a group of one hundred Freshmen, selected in alphabetical order, in the College of Arts and Sciences of the University of Kentucky. It shows

<sup>1</sup> J. B. Miner, "An Aid to the Analysis of Vocational Interests," *Journal of Educational Research*, V (April, 1922), 313.

<sup>2</sup> *Ibid.*



the method of grouping and may be compared with the table for high-school pupils previously published.<sup>1</sup> It mainly suggests how

TABLE I

WORK INTERESTS AMONG FRESHMEN IN THE COLLEGE OF ARTS AND SCIENCES,  
UNIVERSITY OF KENTUCKY\*

	NUMBER PER THOUSAND	
	Men	Women
Growing plants, as in farming, gardening, keeping a greenhouse, etc.	35	56
Care of animals, as in stock raising, care of horses, etc.	40	19
Operating engines, as locomotives, automobiles, steam plants, etc.	14	6
Operating machines, as in manufacturing, using linotype, etc.	28	0
Installing equipment, as electrician, plumber, gas fitter, etc.	7	0
Construction work, as in building, concrete work, railroad and highway construction, engineering, etc.	21	0
Delicate muscular movements, as dentist, instrument-maker, woodworker, etc.	28	0
Discovering and repairing defects, as jeweler, automobile repairman, telegraph repairman, etc.	0	0
Transportation activities, as railroad operation, express, mail, etc.	7	0
Meeting and directing people, as secretary, floor manager, conductor, etc.	50	50
Teaching, as in school, shop, etc.	93	246
Social service, as in churches, factories, welfare associations, nursing, social field work, etc.	28	190
Advisory service, as physician, lawyer, consultant, banker, etc.	150	14
Organizing people, as in societies, work gangs, industrial and business concerns, etc.	28	19
Influencing people directly, as in selling, preaching, campaigning, etc.	64	0
Influencing people indirectly, as in advertising, writing, newspaper work, etc.	98	44
Organized planning, as in business, managing institutions, developing engineering projects, etc.	50	25
Scientific work, as in laboratories, museums, research, etc.	85	31
Making and systematizing records, as in office work, stenography, bookkeeping, library work, etc.	40	44
Entertaining people, as musician, actor, speaker, etc.	78	111
Artistic skill, as in decorating, window-dressing, millinery, costuming, handicraft, printing arts, etc.	28	81
Artistic creation, as in writing, designing, composing music, etc.	14	50
Field of activity not on this list and described as follows:	14	14
Total	1,000	1,000

\* Combined first, second, and third choices.

scattered are the vocational interests in an academic college group. Small differences in percentage are, of course, not significant.

It is a matter of some satisfaction that two noteworthy at-

<sup>1</sup> J. B. Miner, *op. cit.*, p. 315.

tempts to work out groupings of occupations have followed the plan of classifying on the basis of similar interests. During the war an army analysis<sup>1</sup> sought to bring together those occupations requiring similar skills in the use of the same tools. Transfer within such groups might be expected to be more easily made. Common habits of work and the use of the same tools may very well be good indications of types of common interest. More recently Pruette and Fryer have criticized the classification of the Bureau of the Census for the use of vocational guidance on the ground that it follows the "thread of production" rather than "the thread of function." They say:

For the executive to consider his workers under a classification of production alone may prove to be a serious error. The influence of such a classification leads to a tendency of dealing with personnel problems as with machinery and of ignoring the human values, the emotions, the interests, the likes and dislikes which grow to so great an extent out of the closeness of the functional group and which serve to make the human factor the greatest industrial variable.<sup>2</sup>

Moreover, Pruette and Fryer believe that the functional classification which they suggest throws together those with "that strong bond of like-mindedness, due, psychologically speaking, to the constant repetition of stimuli common to them all and to the recurrence of similar reactions."<sup>3</sup> They were further interested in discovering that these forms of group consciousness existed among the four thousand people who passed through their hands in an employment office in New York City. Their classification has not yet been tried out with high-school or college groups.

Another feature of this work-analysis blank requires special comment. It is the part which has the most interest from a research point of view, although as yet it has less immediate usefulness. It is a unique method of recording interests by paired interest contrasts. Such preliminary trials as have been made indicate that it is a promising method. It requires that the individual think directly to the point of a particular comparison. He is asked whether he be-

<sup>1</sup> *Trade Specifications and Index of Professions and Trades in the Army*. War Department Document No. 774, Office of The Adjutant General. Washington: Government Printing Office, 1918.

<sup>2</sup> Lorine Pruette and Douglas Fryer, "Group Problems of the Executive, with a Functional Classification of Occupational Groupings," *Journal of Personnel Research*, III (June, 1924), 40.

<sup>3</sup> *Ibid.*

lieves that he would do better work under working conditions which are indoor or outdoor, public service or private service, requiring broad planning or attention to details, etc. In the earlier article attention was called to its immediate use in discovering unusual traits on the part of a high-school pupil who proves to be one of ten who prefers irregular time for work rather than regular time or one boy of sixteen or one girl of nine who prefers small immediate success to large future success. The comparative numbers among high-school pupils for those making each choice in the various pairs were presented in that article. Corresponding data for a group of 570 first-year students at the University of Kentucky selected alphabetically are given in Table II. The unusualness of a student's interest may be judged by comparison with this table. It must be remembered, however, that prospective engineers, lawyers, teachers, etc., are groups each of which is different in its own ways from this group of students, who are in the first year of their academic or professional courses.

These paired interest contrasts were included in elaborate personal history blanks which the writer prepared for students to fill out on entering the Carnegie Institute of Technology and the University of Kentucky. An unpublished paper on "An Interest Psychograph," which was read at the meeting of the American Psychological Association in Chicago in 1920, reported a preliminary skirmish to discover whether the method might be used to distinguish college students who were looking forward to different vocations. This study of interest profiles was made with small groups in vocational courses at the Carnegie Institute of Technology. Combinations of the interest contrasts were found which, three times out of four, would distinguish the women taking the secretarial course from those taking the home economics course. Other interest profiles would distinguish as frequently the men taking the course in machine construction and operation from those taking the course in electrical construction and equipment. The results seemed to be worth following up.

It will be necessary to use some statistical method which will enable a counselor to evaluate an individual's psychograph and to tell which of a series of vocational profiles it most nearly resembles.

TABLE II  
RESULTS OF CHECKING OF INTEREST CONTRASTS BY FIRST-YEAR  
COLLEGE STUDENTS\*

	Per Cent†		Per Cent†
Indoor .....	29	Thoughtful hand work .....	22
Outdoor .....	61	Thoughtful head work .....	62
Public service .....	41	Methodical work .....	20
Private service .....	48	Meeting new conditions .....	66
Skilled hand work .....	65	Regular time for work .....	71
Skilled heavy work .....	17	Irregular time for work .....	20
Slow movements .....	28	Preparing your plans .....	34
Rapid movements .....	61	Carrying out your plans .....	48
Convincing people .....	38	Work requiring energy .....	54
Investigation work .....	50	Work requiring patience .....	33
Directing others .....	69	Work requiring judgment .....	66
Following directions .....	21	Work requiring industry .....	19
Broad planning .....	47	Work requiring quickness .....	22
Attention to details .....	40	Work requiring reliability .....	65
Less responsibility .....	23	Work requiring speed .....	10
More responsibility .....	63	Work requiring judgment .....	66
Organizing people .....	38	Work in one town .....	44
Constructing things .....	48	Work requiring traveling .....	43
Working with things .....	31	Work requiring sympathy .....	24
Working with people .....	60	Work requiring decision .....	54
Working by yourself .....	32	Work requiring accuracy .....	45
Working with others .....	60	Work requiring originality .....	39
Operating appliances .....	59	Larger future success .....	75
Repairing appliances .....	13	Smaller immediate success .....	13
Doing the same thing .....	13	Work requiring calmness .....	48
Wide variety in work .....	76	Work requiring enthusiasm .....	38
Influencing people directly .....	46	Welfare work .....	35
Influencing people indirectly .....	37	Taking part in entertainments .....	35
Work requiring inspiration .....	36	Work requiring artistic taste .....	39
Work requiring thoroughness .....	49	Work requiring artistic creation .....	32
Making things as directed .....	30	Work requiring common sense .....	63
Following your own methods .....	59	Work requiring special information .....	21
Work requiring expression .....	47	Increasing the amount of production .....	22
Work requiring computations .....	28	Improving the quality of the product .....	54
Work requiring quick results .....	41	Greater pay with risk or discomfort .....	39
Work requiring perseverance .....	40	Less pay with more safety and comfort .....	44
Work in office .....	38		
Work requiring that you teach .....	37		

\* The directions given were as follows: Notice the contrasts in the working conditions listed. See how they are related to your own interests and abilities. Whenever you can distinguish a difference in yourself, check that one in the pair under which you believe you would do the better work. Consider in which one of the pair, after training, you would trust yourself more to meet the competition of others. Failure to check one of a pair will indicate that you cannot distinguish a difference in yourself in that contrast.

† In each case the remaining percentage of students checked neither condition.

Such a method has recently been devised and tried with college groups. Of course, no method for thus discovering more fundamental vocational trends of interest will succeed unless the different vocations themselves appeal to distinctively different types of interest. Ultimately this can only be settled by extended investigations among the members of the different vocations who have for a long time adjusted themselves to their particular work and who find themselves satisfied with this work. It should be possible, when such data are available, to say to an individual that his vocational-interest psychograph shows, let us say, a value of 20 in its resemblance to the profile of lawyers, a value of 15 in its resemblance to the teacher's type, a value of only 8 in its resemblance to the profile of engineers, and a value of 3 in its resemblance to the profile of carpenters. Before the interest psychograph is a complete scientific instrument for vocational guidance, it should be possible to state the error of each of such values and the probability that the record will correctly place individuals who belong to these vocational types.

The following is a list of the various uses to which the blank in its present form may well be put.

1. Provided that the individuals who fill it out are high-school pupils or of equivalent intelligence, it will assist them to discover vocational bents by calling their attention to their special interests and abilities.
2. It will assist individuals in choosing a field of vocational activity by narrowing the range of vocations to be considered through the grouping of vocations under types which tap similar interests.
3. It will interest young people in starting to make their vocational choices.
4. It will interest parents in the vocational adjustment of their children. This was found to be true in Pittsburgh. After the pupils had filled out blanks without consultation, they were given second copies to take home and discuss with their families.
5. If the blank is filled out before the individual meets the vocational counselor for discussion, the information will assist the counselor materially by shortening the interview and making it more effective.

6. It will enable the counselor to point out apparent consistencies and inconsistencies in the individual's thought about his vocational preferences. The counselor may check the choice of a vocation against the record of interest contrasts and against the probable opportunities to obtain the necessary training and the available contacts for entering the chosen line of work.

7. It will provide certain records for surveys of groups in different localities or schools or of groups making different vocational choices.

The sections of psychology and anthropology of the American Association for the Advancement of Science recently held a joint meeting devoted to the problem of selecting immigrants. At this meeting there was a vague groping toward an idea which ultimately may play a large part in the fundamental solution of the problem of guiding the social organism toward the satisfaction of its vocational needs. There was a feeling that the present method of limitation of immigrants on the basis of nationality is inadequate. One speaker thought that attention should be given to selecting family lines, another that attention should be given to selecting intelligence. It has been discovered that selection by nationality may cause nations with high average ability and a large quota to send to this country a low type of immigrants because jobs are not available here for those of greater ability. So, in vocational guidance, the far view seems to suggest that in the distant future the time may come when guidance will have a new function to perform, the function of calling the youth's attention to the vocational needs of the social organism as a whole. By "vocational needs" is not meant "vocational demands," which may be quite different. In order to preserve its balanced functioning, society requires that some shall enter the fields of their second choices. Many individuals may in this way find the happiness which goes with the satisfaction that they are thus fulfilling a need of the whole social body, a need which is more important than small differences in their own vocational interests.



## AN EXPERIMENTAL STUDY OF THE MERITS OF EXTENSIVE AND INTENSIVE READ- ING IN THE SOCIAL SCIENCES

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*The problem.*—The purpose of the study here reported was to determine the comparative success of extensive reading and intensive reading in the social-science field.

*Importance of the problem.*—The investigation requires little justification because of the wide variation in the amount of supplementary reading assigned by college and high-school instructors. An examination of the practice with reference to supplementary assignments at the University of Chicago brings out this point very clearly. Some instructors require a very small amount of reading beyond the basic text or texts of the course but expect a rather complete mastery of the details of the material read. Other instructors require the reading of ten or twelve volumes during a quarter and in some instances set up definite minimum reading requirements of from one thousand to twenty-five hundred pages. The supplementary reading is usually tested by short written examinations, by an inspection of the student's notes on the material read, or by a final examination.

In a recent investigation Curtis<sup>1</sup> found that secondary schools differ widely in their current practices with reference to the use of texts, syllabi, and extensive reading in general science. His information was secured by means of a questionnaire sent to 206 selected secondary schools, 105 of which replied. Of the schools replying, 70.2 per cent base their courses in general science on only one text; 23.8 per cent report that there is a lack of an adequate supply of texts for their courses. Extra-text readings are assigned definitely

<sup>1</sup> Francis Day Curtis, *Some Values Derived from Extensive Reading of General Science*, pp. 8-10. Teachers College Contributions to Education, No. 163. New York: Teachers College, Columbia University, 1924.

and are required in 50 per cent of the schools replying. Certain extra-text reading is suggested but not required in 82.1 per cent of the schools replying. The teachers were asked to suggest an "ideal" plan for course reading in general science, and 51.7 per cent of those who replied made a single text the basis of such reading, but 60 per cent included definite, *required* extra-text reading in their ideal extensive reading plans; 25 per cent included *suggested* extra-text reading; and 13.3 per cent included *suggested reading along with required reading*.

The Advisory Committee on the Social Studies of the Commonwealth Fund suggested the need for the investigation of the problem of extensive and intensive reading. The advisory committee indicated certain phases of the problem which, in their opinion, merit investigation.

Could it not be shown conclusively how relatively little is acquired from a single reading of an assigned chapter or book in comparison with a second or third reading?

It is a common practice to assign multiple readings, that is, various texts or books on the same subject, these more or less duplicating one another. How do these multiple assignments compare in value with a single assignment, which might be read once, twice, or three times? . . .

What is the effect of a single reading of an assignment in the social sciences?

What is the effect of a single reading followed by a re-reading?

In what way does reading under the guidance of a problem differ from the reading of an arbitrary assignment?

How may one develop the ability to organize data gathered from a variety of references?

*Definition of terms.*—The terms "extensive reading" and "intensive reading" as used in this study may be defined in two ways. Such terms may designate the amount of reading that is done. For example, if one group reads two hundred pages on a given topic and a second group reads only sixteen pages on the same topic, it may be said that the former group does "extensive reading" and the latter group "intensive reading." In the second place, the terms "extensive reading" and "intensive reading" may be applied to situations where the material is the same but where the reading procedures vary. For example, if one group reads a one-page discussion once and a second group reads the same discussion twice, the former group does "extensive reading" and the latter group "intensive reading."

It is assumed that a single reading is the procedure used in extensive reading, since the student who has an assignment of two hundred pages will probably devote to it only the time necessary for a single rapid reading. On the other hand, two or more readings may be considered as an intensive procedure, since the student who has an assignment of only sixteen pages will probably read it rather carefully and more than once.

The terms "comparative success" and "merits" as used in this study mean the ability of the student (1) to answer questions which test range and accuracy of information, (2) to apply material which has been read to the solution of problem situations, (3) to reproduce ideas or thought units gained from assigned reading material, (4) to retain material once acquired, as shown by a retest, and (5) to sense relationships, as evidenced by proficiency in outlining the main points and subpoints of a short article. These five categories were selected on the basis of a canvass of the literature in the social-science field. In order to determine these major lines of emphasis for the purpose of experimental investigation, the writings of various prominent authorities in social science were examined. An examination of the literature outside the social-science field showed that other experimenters are using the same five factors in testing the progress and comprehension of students.

*Methodology.*—Two types of experiments were made: (1) experiments involving reading done outside the regular class period to determine the merits of extensive and intensive reading of the subject matter of a given course and (2) experiments involving reading done under controlled conditions within the regular class period to determine the merits of extensive and intensive reading of material extraneous to the subject matter of a given course. The first are called course-material experiments and the second extraneous-material experiments. The extraneous-material experiments were made as a check on the results of the course-material experiments.

The general technique of the investigation involved (1) the selection of classes for experimentation, (2) the division of the classes into parallel groups, (3) the selection of reading assignments, and (4) the construction of tests with which to measure the five elements selected for purposes of experimentation.

*Classes selected.*—Classes in the College of Education of the University of Chicago, in the University College, and in the University High School were used. The experimental work extended over a period of three quarters. With one exception, no one class participated in the experiment more than one quarter. Ten classes with enrolments of from thirty to fifty students each took part in the investigation.

*The parallel groups.*—It was necessary to select some means of forming parallel groups which would use different reading procedures. On the whole, intelligence seems the most important single factor in determining the comprehension and the progress of students. "With very few exceptions, the studies . . . show a greater or less degree of positive correlation between general intelligence and reading achievement. . . . The studies . . . show clearly that progress in reading depends to a considerable extent on the level of intelligence of the learner."

The Otis Self-Administering Tests of Mental Ability were used as a basis for forming the parallel groups. Each of four classes was divided into two equal sections on the basis of intelligence. In three instances two classes of equal intelligence were used as parallel groups. A combination of the parallel-group method and the rotation-group method of experimentation was used in certain experiments. This involved the reversal of the reading procedures of the parallel groups at regular intervals; that is, a given group read extensively for a definite number of assignments and then exchanged reading procedures with the parallel group, which had been doing intensive reading. In one experiment the groups were reversed three times. When the reading procedures of two groups are reversed, the results serve as a check on the results previously secured.

*The reading assignments.*—The general procedure in the course-material experiments (information, problem-solving, and reproduction) was to select certain topics of a given course as the basis of reading assignments. The intensive group read only the textbook treatment, while the extensive group read both the text and a rela-

<sup>1</sup> William Scott Gray, *Summary of Investigations Relating to Reading*, pp. 48, 51. Supplementary Educational Monographs, No. 28. Chicago: Department of Education, University of Chicago, 1925.

tively large amount of supplementary material. The extraneous-material experiments (information, problem-solving, and reproduction) followed the same general plan except that the reading assignments were mimeographed and were much shorter. This was due to the fact that the reading was done under controlled conditions and was followed by a test within a single class period. For instance, in one extraneous-material experiment the extensive group read three pages on a given topic, while the intensive group spent the same amount of time in reading one page of condensed material on the same topic.

The general procedure employed in selecting and making the reading assignments may be illustrated by giving two examples. The course-material experiment which investigated range and accuracy of information was carried on in Education 2, "Introduction to the Scientific Study of Education." Eight chapters or topics in the text, Judd's *Introduction to the Scientific Study of Education*, were selected as the basis for eight reading assignments and for eight subsequent tests in the course of the quarter's work. The topics selected were "Financing Education," "Grouping Pupils in Classes," "Specialized Education versus General Education," "Extension of School Activities," "Individual Differences," "Standardization," "Play," and "Health Supervision." The extensive-reading assignments were selected either from the references listed at the end of the textbook chapters or from other sources which supplemented adequately the material of the text on a given topic. Usually from 150 to 200 pages were assigned to the extensive group as supplementary material. The textbook chapters usually included from ten to eighteen pages. Assignments were made one week before the test in order to allow ample time for the extensive group to complete the assignment.

The course-material experiment which tested problem-solving was conducted in Education 6, "Psychology of High-School Subjects." In this class four topics of the text, Judd's *Psychology of High-School Subjects*, were selected as the basis of the reading assignments. The topics were "The Psychology of Foreign Languages," "The Psychology of Manual and Industrial Arts," "Generalized Experience," and "The Psychology of Study." The extensive group

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usually read from one hundred to two hundred pages of supplementary material on a given topic in addition to the text assignment. Two weeks were allowed for the reading because of the relatively difficult material assigned.

*The tests.*—The information tests and some of the problem-solving tests consisted of two parts. The first part was based on the text or the condensed assignment, and the second part was based on the supplementary material. Both parallel groups took the same test in every instance. The reproduction of parts of typical tests of information and problem-solving will illustrate the types of questions or problems used.

#### TEST 5, EDUCATION 2—INDIVIDUAL DIFFERENCES

1. The elective system of the high school and college is a recognition of what principle?
2. A conservative estimate of the number of permanently subnormal persons in a thousand as a result of heredity or pathological conditions in early childhood is: 0.2, 0.5, 1, 2, 3, 4, 6, 8, 10, 20.
3. What term does the report of the British Royal Commission on the Feeble-minded apply to persons "so deeply defective in mind from birth or from early age that they are unable to guard themselves against common physical dangers"?
4. In progressing from the lowest grade of defectives to normality, what are the other classes or grades in order?
5. The higher grades of defectives may escape detection until they try to learn what two subjects?

#### TEST 3, EDUCATION 6—GENERALIZED EXPERIENCE

(All questions present problems to be solved or situations to be evaluated. Supply the answers which, in your opinion, seem best.)

1. The children of the sixth grade had been very careless in their written work. To overcome this defect, the teacher drilled them very carefully in their daily written work in spelling and secured marked improvement. However, she was greatly surprised after three weeks of daily drill on neatness in spelling to find that the history papers were written as poorly and as carelessly as before. What element did this teacher neglect in training her pupils?
2. Twin brothers, John and Robert, were amusing themselves at the Y.M.C.A. swimming pool by throwing darts at a target under water. A high-school physics teacher had whispered some advice to John before the boys started the game, but he did not succeed any better than did his brother. After some time the boys moved the target to a deeper part of the pool, and there

John learned to hit the target much more rapidly than did Robert. What did the teacher tell John in the beginning?

3. A student read a chapter on the transfer of training which listed a number of experiments showing that training one hand in gripping, tapping, hitting dots, and tracing brings about a great improvement in the other hand in doing the same things. He decided that such experiments are conclusive evidence of the large amount of transfer possible in the various types of learning. Evaluate his point of view with regard to the experiments mentioned.

The reproduction tests in both types of experiments (course-material and extraneous-material) required that the student write in separate sentences the various ideas which he recalled on a given topic. The following typical directions apply particularly to the extraneous-material tests, but they are almost identical with those used in the course-material tests.

#### DIRECTIONS FOR REPRODUCTION OF IDEAS OR THOUGHT UNITS

You have read a short article on the subject of "Generalized Experience" "City Zoning" (Underline the proper topic.). Now you will have an exercise in which you are to write as many ideas or thought units as you recall about this subject. State each idea *briefly*, yet *adequately*, in a separate sentence and number the statements consecutively. Begin at the left margin of the page with each new idea. Do not paraphrase, duplicate, or repeat ideas. Be sure to make each statement a complete sentence. Arrange and number your ideas like the examples given below. Write *only* ideas which are contained in the article you read.

The following are some examples of correct ideas on the subject of "Play":

1. Play provides mental relaxation.
2. Play is natural behavior.
3. Infants are in the rattle stage of play.
4. The school should supervise the play of children.
5. The Puritans did not believe in play.
6. Children need a place to play.
7. Children also need play equipment.
8. The city parks have children's playgrounds.
9. Each child ought to have some playmates.
10. Play helps to make a strong physical body.

The following are some examples of statements or ideas on the subject of "Play" which are too general, too incomplete, or too incorrect to be accepted:

1. There is play.
2. Interscholastic athletics are better than intramural sports.
3. Baseball is one.
4. The only play school children need is calisthenics or gymnastics.

5. Win the game at any price.
6. Play hurts moral character.
7. Everybody does.
8. Marbles is one in the spring.
9. Most boys like to play with dolls.
10. Babe Ruth is the best in the country.

The outline experiment used expanded and condensed treatments of the same topic in order to determine the effect of each type of material on the student's ability to outline the main points and sub-points. Each treatment was based on the same skeleton outline, but the expanded form included numerous sentences which were explanatory and had no definite place in the outline. Such sentences were to be marked with an "X." Each sentence of the condensed treatment fitted into a definite place in the outline. The material of a study outline test<sup>1</sup> was adapted for the purpose of the experiment. The directions used were the same as those devised by the authors of the original test. The first paragraph of both the condensed and the expanded treatments will illustrate the composition of the test. Each treatment contained three paragraphs. However, the condensed treatment contained twelve sentences, while the expanded treatment included nineteen additional sentences. In the reproductions on page 763 the correct outlines are given in the right-hand columns.

Retention was investigated by administering a large number of retests, which involved range and accuracy of information, problem-solving, and reproduction of ideas.

*Scoring.*—The point system of scoring was used throughout the experiments. Such a system permits objectivity and uniformity of scoring and ready mathematical manipulation of the scores. In the information tests one point was allowed for each correct answer or for each correct item when a question required a listing of items by way of answer. In the problem tests one point was given for each problem correctly solved. In the reproduction tests one point was given for each idea or thought unit correctly expressed in a complete sentence. In the outline test one point was allowed for each point or subpoint properly placed in the outline; explanatory sentences were not scored.

<sup>1</sup> F. Dean McClusky and Edward William Dolch, "A Study Outline Test," *School Review*, XXXII (December, 1924), 757-72.

*Results of the information experiments.*—Table I gives the average point scores on the eight tests in one of the course-material experiments. It is observed that the intensive group scored higher than did the extensive group on the first part of each test, the part involving text material. The differences in scores range from 1.0 to 4.7 points. Even though the groups were reversed three times in the course of the experiment, the relation between the intensive group

The Paragraphs to Be Outlined	Sentence Number	Place Your Outline Here
There is a growing conviction that the public school is the logical agency to carry on nutrition work for the community. One quite obvious reason is that the school has more opportunity to do this work than has any other agency.	1	I
	2	A

The Paragraphs to Be Outlined	Sentence Number	Place Your Outline Here
There is a growing conviction that the public school is the logical agency to carry on nutrition work for the community. People are gradually ridding themselves of the traditional idea that such a problem as the nutrition of school children has no legitimate place in the school program. There are several reasons why this new way of thinking has come about. One quite obvious reason is that the school has more opportunity to do this work than has any other agency. It has more of the children's time than any other agency possibly could have. The children are in school from nine o'clock in the morning until three or four o'clock in the afternoon. The church has the children only one day in the week, and the home has them at night and on holidays.	1	I
	2	X
	3	X
	4	A
	5	X
	6	X
	7	X

and the extensive group remained the same. The intensive group concentrated on a relatively short reading assignment, while the extensive group diffused its efforts over a much longer assignment. It may be expected that a student who has one week in which to read sixteen pages on the topic, "Grouping Pupils in Classes," will spend a relatively greater amount of time on such an assignment and study it more intensively than a student who must read two hundred pages on the same topic in the same amount of time. Particularly is this true when the test is made up of questions asking for detailed information.

An examination of the scores made in the case of the supplementary material in Tests 2-8, inclusive, shows that the extensive group scored higher in every instance than did the intensive group. The differences in scores range from 0.9 to 4.1 points. In view of the fact that the intensive group read only the text, this group was not expected to do as well as the extensive group on this part of the test. The striking fact is that the extensive group was compelled to

TABLE I  
AVERAGE INFORMATION SCORES IN A COURSE-MATERIAL EXPERIMENT

	TEXT MATERIAL	SUPPLE- MENTARY MATERIAL	BOTH	TEXT MATERIAL	SUPPLE- MENTARY MATERIAL	BOTH
	Test 1			Test 2		
Group A (Intensive).....	15.3	.....	15.3	14.0	6.3	20.3
Group B (Extensive).....	14.3	.....	14.3	12.5	9.4	21.9
	Test 3			Test 4		
Group A (Extensive).....	9.3	5.3	14.6	10.5	8.7	19.2
Group B (Intensive).....	10.5	4.4	14.9	12.5	7.6	20.1
	Test 5			Test 6		
Group A (Intensive).....	16.0	6.1	22.1	17.4	3.5	20.9
Group B (Extensive).....	14.6	8.9	23.5	16.4	7.6	24.0
	Test 7			Test 8		
Group A (Extensive).....	18.1	15.1	33.2	20.8	14.8	35.6
Group B (Intensive).....	19.7	11.0	30.7	25.5	11.5	37.0

surrender an appreciable degree of mastery of the text in order to cover the assigned supplementary readings.

The total scores furnish the basis for some interesting conclusions. The differences between the two groups range from 0.3 to 3.1 points with only two tests where there is a difference of more than 1.6 points. This leads to the conclusion that the inferiority of the extensive group on the text assignment is balanced by approximately equal superiority on the supplementary-reading assignment. The opposite relationship exists between the two parts of the test for the intensive group. These relationships hold true even though the



groups were reversed three times in the course of the experiment. Other information experiments indicate a more pronounced superiority on the part of the extensive group in terms of the total score. Had the second part of each test been longer, it is quite probable that the extensive group would have been very much superior to the intensive group in terms of the score on this part of the test and consequently in terms of the total score.

Certain statements may be made by way of summarizing the results of the information experiments. The information tests indicate the superiority of the extensive group over the intensive group. However, each group secured distinct value from its reading. The

TABLE II  
AVERAGE PROBLEM-SOLVING  
SCORES OF CERTAIN  
PARALLEL GROUPS

Extensive Group	Intensive Group
11.3	9.6
10.2	11.0
8.6	7.8
11.8	9.1
8.0	7.7
7.4	7.3
6.9	6.3

intensive group scored higher on the first part of the test, which was based on the text or the condensed assignment. The extensive group was markedly superior on the second part of the test, which was based on the supplementary assignment. The total score shows that the extensive group had a substantial advantage over the intensive group.

*Results of the experiments in problem-solving.*—The results of the problem-solving tests are in substantial agreement with the data for the information tests. Table II indicates the test performances of the various parallel groups which participated in the problem-solving experiments.

On the whole, the results of the experiments in problem-solving point to the superiority of extensive reading in evaluating and solving given problem situations. Certain tests indicate that, by more

complete mastery of the details of limited assignments, the intensive group is able to score relatively high on informational questions and problems which are based on such assignments. The extensive group secures a breadth of information from supplementary assignments which enables it better to solve problem situations that are based on supplementary reading or on the general literature in the field.

*Results of the outline experiment.*—The data of the outline experiment corroborate the conclusions of the information and the problem-solving experiments. The results point to the superiority of extensive reading over intensive reading in differentiating between the main points, the subpoints, and the explanatory material of an article. Table III presents the average scores of the various parallel

TABLE III  
AVERAGE OUTLINE SCORES OF  
CERTAIN PARALLEL GROUPS

Extensive Group	Intensive Group
10.7	10.2
9.2	10.6
10.2	7.8
8.3	7.5

groups which participated in the experiment. Perfect performance resulted in a score of twelve points on either treatment (condensed or expanded).

The results of the outline test ran counter to the assumption of the writer at the time the test was devised. It was thought that a condensed treatment with no explanatory sentences could be outlined much more readily than an expanded treatment of the same subject which included numerous explanatory sentences. The directions may have led those in the intensive group to think that explanatory sentences were included in their assignment. However, in order to secure comparable results, it was necessary to give the same directions to both groups.

*Results of the reproduction experiments.*—The reproduction experiments indicate that for the purpose of reproduction of ideas intensive reading of a relatively small amount of material gives virtually as good results as does more superficial reading of a much larger body of material. The question may be raised whether reproduction of

ideas is of sufficient educational significance to justify intensive reading, since extensive reading proves more effective in terms of the other values investigated. Table IV gives the average scores of the parallel groups which took part in the reproduction experiments.

Intensive reading seems especially superior to extensive reading in reproducing ideas in the case of a difficult topic, such as "Generalized Experience." In general, the ideas of the extensive group were more general, vague, and repetitious than those of the intensive group.

*Results of the retention experiments.*—With regard to retention, the extensive group, on the whole, maintained its superiority in the original tests on the information and problem retests. On the re-

TABLE IV  
AVERAGE REPRODUCTION  
SCORES OF CERTAIN  
PARALLEL GROUPS

Extensive Group	Intensive Group
17.4	17.7
22.4	19.2
8.5	8.4
12.6	16.5

production retests the intensive group was superior to the extensive group. The reproduction scores were influenced more by the lapse of time between the original test and the retest than were the information and the problem scores. The decrease in the information and the problem retest scores is small when compared with the original scores. Possibly exchange of ideas among students and class discussions were factors enabling the various groups to score relatively high on the information and problem retests. However, such influences should have operated alike in the case of both parallel groups.

*Comparison of the test performances of the upper and the lower intelligence quarters.*—On the whole, the upper intelligence quarter (upper fourth) of a given group is superior to the lower quarter (lower fourth) on all types of tests. Such results aid in establishing the validity of the method used in selecting the parallel groups. Table V illustrates the superiority of the upper intelligence

quarter; it includes the average scores of the upper and the lower quarters of all groups which took part in the outline experiment.

The results of certain of the problem-solving tests suggest that students of relatively low intelligence do their best work in dealing with informational questions based on definitely limited assignments rather than in comprehending situations which introduce new elements or which involve the exercise of judgment in solving problems. The reproduction point scores of the upper and the lower intelligence quarters indicate only a slight advantage in favor of the upper quarter. Such results suggest that students of the lower quarter in intel-

TABLE V  
AVERAGE OUTLINE SCORES OF THE UPPER AND THE LOWER  
INTELLIGENCE QUARTERS OF CERTAIN  
PARALLEL GROUPS

	Upper Quarter	Lower Quarter
Extensive group.....	11.7	9.2
Intensive group.....	10.8	9.2
Extensive group.....	9.6	8.7
Intensive group.....	11.3	9.9
Extensive group.....	11.0	8.7
Intensive group.....	10.2	6.2
Extensive group.....	8.8	9.3
Intensive group.....	8.2	6.8

ligence do relatively good work on tests which involve the more mechanical processes of reproduction, recall, and memory. On the other hand, the results of other types of experiments show the superiority of the upper quarter in the higher thought processes involved in the problem-solving, outline, and information tests.

*Problems for further investigation.*—The results of this study seem to warrant the suggestion of certain additional problems for experimental investigation: (1) ability grouping and reading assignments which are differentiated in character and amount; (2) the differentiation of assignments according to the aim or the purpose of the reading; (3) the determination of the relative difficulty of the reading materials to be used in a course before the length of the assignments is fixed; (4) the determination, by means of case studies, of

the effect of extensive and intensive reading procedures on individual students; (5) the relation of extensive reading and intensive reading in school subjects other than social science; (6) an intensive analysis of any one of the five factors investigated in this study; (7) the effect of extensive reading and of intensive reading on such subjective and subtle factors as appreciation, habits, interests, and ideals; (8) the effect of the reader's attitude on the comprehension of the material read; (9) the effect of extensive reading and of intensive reading on the eye-movements of the reader; (10) the effect of class discussions on the comprehension of reading assignments which have been covered outside the class period; (11) the way in which reading done under the guidance of a problem differs from the reading of an arbitrary assignment; (12) the development of the ability to organize data gathered from a variety of references.

*Conclusions and application to school procedure.*—The results of this investigation indicate that the character and the length of reading assignments should vary with the purpose of the reading. If accuracy and a mastery of detailed information are desired, a relatively brief and definite reading assignment should prove effective. If breadth and range of information are the aims, the basal text should be supplemented by rather extensive reading assignments. Ordinarily, an appropriate combination of limited text assignments and supplementary materials should produce good results in range and accuracy of information.

On the whole, it seems more economical, in view of the time spent and the information acquired, to devote a single reading to a relatively large body of material than to re-read a more limited assignment. The length of supplementary assignments should be governed by the difficulty of the material to be read.

What has been said of reading for informational purposes applies equally to reading for the purpose of solving problems. A well-organized basal text should give a certain definite body of factual information, and wide extensive reading should furnish a breadth of information which enables the student to interpret and evaluate unfamiliar problem situations. Again it may be stated that an appropriate combination of extensive reading and intensive reading is desirable for general purposes.

When the reproduction of ideas is the aim of reading, the intensive study of a relatively small amount of material gives virtually as good results as does extensive reading. Since reading assignments are usually made for a variety of purposes, intensive reading should not be employed exclusively because of its value in reproducing ideas. The superiority of extensive reading along other lines more than offsets any limitations it may have in this respect.

If permanency of retention is desired, the reproduction of ideas proves a rather uneconomical aim of reading. The number of ideas reproduced in the retest was small as compared with the number reproduced in the first test. Range and accuracy of information and the application of knowledge to problem situations are relatively economical aims of reading as measured by permanency of retention.

The results of this study indicate the desirability of investigating the problem of ability grouping and differentiated reading assignments. Possibly the lower intelligence groups will profit from reading a fairly limited body of material which presents the minimal essentials of the topics treated. It seems probable that the lower intelligence groups will do better work in dealing with informational questions based on such definitely limited assignments than in comprehending situations which introduce new elements or which involve the exercise of judgment in solving problems. The more intelligent groups should secure distinct values from extensive reading assignments.



## PUPIL REACTION TO SCHOOL REPORTS. I

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*The value and the technique of the study.*—How frequently do school administrators make a serious effort to get the pupils' point of view before settling problems of school administration? Far too infrequently, one feels safe in declaring. It was this conviction that led the writer to undertake an investigation two years ago in an effort to secure at least an approximate idea of the reaction of the average high-school pupil to the ordinary school reports.

Data were obtained through a questionnaire submitted to 1,513 pupils, distributed as follows: Eastern High School, Washington, D.C., 181 pupils (93 boys, 88 girls); DeWitt Clinton High School, New York City, 428 pupils (all boys); Julia Richman High School, New York City, 489 pupils (all girls); Lincoln School of Teachers College, Columbia University, 90 pupils (47 boys, 43 girls); Maury High School, Norfolk, Virginia, 133 pupils (46 boys, 87 girls); Bayonne High School, Bayonne, New Jersey, 192 pupils (99 boys, 93 girls). Each of these groups was selected by the school authorities so that it would contain pupils of varying degrees of both ability and achievement and would represent the different economic and social strata of the school. Only senior high school pupils answered the questionnaire; their ages ranged from thirteen to twenty-one years, the vast majority of the pupils (1,409) being from fourteen to eighteen years of age. The writer is deeply grateful to the pupils, to their teachers, and to their principals for courteous, enthusiastic, and conscientious co-operation in this study.

The form and the content of the questionnaire were the result of generous professional co-operation. Franklin W. Johnson, of Teachers College, Columbia University, under whose direction the study was made, contributed a number of the questions and made numerous constructive criticisms. Otis W. Caldwell, director of the Lincoln

School, voluntarily offered the services of Cecile Colloton, a psychologist of the school, who thoroughly criticized the form and the content of the questionnaire before they were finally decided upon. Members of a graduate class studying the problems of high-school administration suggested a large percentage of the questions used; the writer evolved the remaining questions and largely determined the form and the content of the questionnaire, which was so constructed that it had to be answered anonymously. Each question was answered either by underlining a word or words or by checking certain items. By this means facility and accuracy were enhanced. The writer gave the questionnaire to the pupils of the Julia Richman High School, the DeWitt Clinton High School, and the Maury High School; in each of the other schools the principal saw that the questionnaire was given in accordance with directions.

The details of the study were planned to elicit from the pupils conscientious, deliberate, truthful, and, therefore, reliable answers. Reasons for believing that this end was attained will appear at appropriate points of the discussion to follow, but probably the most helpful aid in its accomplishment was the following word of explanation appearing at the beginning of the questionnaire.

There is nothing mysterious about the questions that follow. They are asked in order to find out whether school reports are really valuable. You have noticed that **YOU ARE NOT ASKED TO TELL YOUR NAME**. Therefore, you can say *exactly* what you think, without the slightest chance of suffering any unfortunate consequences whatever.

This investigation is by no means thought to reveal the final word on any phase of the administration of school reports. It is sincerely hoped, however, that the readers of this account, even though its interpretations of data are uniformly decidedly conservative, will seriously ask themselves, Are reports as at present administered worth their cost in teacher and pupil energy and in school funds? Are not some of the innovations approved by the pupils worthy of trial in our schools? Should not the kind of report used in any school be determined by studies similar to this one? If an opinion in any case seems to be stated rather dogmatically, it is due to the writer's belief that a study of much broader scope would not be likely to modify the findings of the present study to any great extent.

## PUPILS' OPINIONS REGARDING THE RELIABILITY OF MARKS

The answers to the following questions, which, it should be noted, did not appear in the same order in the questionnaire, provide a possible basis for interpreting the pupils' attitude toward the reliability of marks.

*Do you think that your marks give your parents (or guardian) a true estimate of what you have done in your studies?* This question, it is evident, seeks to find out whether, in general, the pupil's estimate of his accomplishment is represented by the mark assigned by the teacher. Almost 50 per cent (48.2 per cent) of the pupils declared their belief that their marks are fair representations of their accomplishments; a similar percentage (43.4 per cent) of pupils are convinced that this is not the case. If it is assumed that those pupils who did not answer the question (8.4 per cent) are doubtful about the matter, more than one-half (51.8 per cent) of the pupils are not convinced that marks truly represent accomplishment. If this be true, is it not reasonable to suspect that to at least one-half of the pupils marks are not an incentive to do the most enthusiastic, whole-hearted work in school?

*Do you get the highest marks in the subjects you study the hardest?* This question is very similar to the preceding one, and the answers provide a check on the validity of the answers to the first question. It is therefore interesting to discover that 55.3 per cent of the pupils do not get the highest marks for the hardest study, an apparent corroboration of the responses to the first question. This response is not unreasonable, for it is true that the more difficult a subject is for an individual, the greater the amount of effort he must expend to produce results. Some teachers declare that they mark *effort* as well as achievement. The response to this question makes one very skeptical of teachers' ability to *measure effort reliably*. Moreover, if the writer's comments on the response are valid, then is it not almost inevitable that marks should make many pupils content with "just a passing mark"?

*Do you think that your marks are fair when compared with those of other pupils?* The negative answers given to this question by 46 per cent of the pupils undoubtedly do not indicate that teachers are deliberately unfair in their marking; they more likely signify that a

very large percentage of the pupils feel that teachers are *incapable* of making fair judgments of their pupils' work. Although admitting that teachers are better qualified to judge the work of pupils than are the pupils themselves, one is not surprised at the large number of pupils doubting the fairness of teachers' marks; the studies made by Starch and others justify the pupils' skepticism. As 8.7 per cent of the pupils did not answer the question, 54.7 per cent of them are not certain that their marks are fair by comparison. In the case of these pupils, it is hardly reasonable to believe that marks are an incentive to the best kind of work. On the other hand, it is somewhat to the credit of the teachers that 45.3 per cent of the pupils seem to feel that teachers give just marks.

*Do you usually get about the same mark on each subject every time it is marked on your report?* The affirmative answers given to this question by 41.5 per cent of the pupils could be reasonably interpreted as showing either (1) that about 40 per cent of the teachers get into the "habit" of giving each pupil the same mark each time or (2) that the quality of the work of about 40 per cent of the pupils remains constant. The variation in the marks of 46.7 per cent of the pupils is explicable on the basis of intermittent laxness in study; on the basis of temporary interrupting influences, such as holiday periods and excitement accompanying special school activities; on the basis of varying degrees of difficulty in the subject matter studied; or on the basis of the factors pointed out in previous studies revealing the unreliability of teachers' marks. Almost 12 per cent of the pupils failed to answer the question. This fact may have been due to their inability to recall the consistency or inconsistency of their marks or to their indifference to the question. It is worth noting that a larger percentage of the boys (45.4 per cent) than of the girls (38.0 per cent) receive uniform marks; this means not that each pupil gets the same mark on every one of his studies but that the mark for each study remains practically constant. It is possible that these findings show that among the boys are to be found more of the consistent workers.

*Do you feel that your teachers carefully consider your marks before assigning them?* Affirmative answers were given by 48.5 per cent of the pupils. On the other hand, 40.9 per cent of them answered nega-

tively, and 10.6 per cent did not answer at all; thus slightly more than one-half of the pupils are not convinced that teachers carefully consider marks before assigning them. It cannot be declared with assurance that this attitude is justified by the usual practice of teachers, but it seems to demand that teachers should give serious attention to the problem of convincing their pupils, if it be true, that marks are conscientiously and carefully assigned. Otherwise, why should pupils or anyone else attach much value to marks?

*Do you consider a low mark the first month a bluff by the teacher to make you work harder?* Approximately one-third (36.8 per cent) of the pupils answered this question affirmatively; more than one-half (52.9 per cent), negatively; about 10 per cent failed to answer. The percentage of pupils regarding initial low marks as bluffs is rather large; yet one wonders whether the percentage of teachers guilty of the practice is not greater than that implied here.

*Are some of your teachers "harder" or "closer" markers than are others?* The fact that three-fourths (75.9 per cent) of the pupils answered this question affirmatively is but additional evidence that marks are largely determined by the individual temperaments of teachers.

*Do all your teachers usually give you just about the same mark; that is, do all of them give you a high mark at the same time or do all of them give you a low mark at the same time?* Only 29.2 per cent of the pupils answered this question affirmatively. Apparently, this response indicates that teachers judge the work of practically 30 per cent of the pupils to be of the same quality in *all* the subjects taken by them. The fact that 32.3 per cent of the girls and 25.8 per cent of the boys answered affirmatively suggests that a larger percentage of the girls consistently do the same quality of work in *all* subjects. It is not surprising that the quality of work done by the majority of pupils seems to vary with the different subjects studied, methods of instruction and pupil attitude toward a subject being typical of the factors that could account for the variation.

On the basis of the combined answers to the questions included in this section, it seems reasonable to hold that very likely about one-half of the high-school pupils do not attach much value to marks. If this be true, is it not opportune to ask whether school administra-

tion is not placing too much stress on the significance of marks and their effect on pupils in general?

#### EFFECTS OF HIGH MARKS, LOW MARKS, OR NONE AT ALL

The questions dealt with in this section show conclusively that pupils are not indifferent to marks, high or low, and that educationally we have not reached a utopian stage that will permit us to dispense with marks altogether. In the questionnaire the questions appeared in a different order.

*Do you ever ask yourself why you probably got a high mark?* Unfortunately, this question was not worded so that it would reveal the frequency or the infrequency with which pupils ponder over the reason for a high mark. It is impressive to find, however, that about one-half (47.9 per cent) of the pupils declared that at some time they have done so. This percentage is somewhat greater than was expected. If affirmative answers imply impressiveness to the pupils, a larger percentage of the boys (51.3 per cent) than of the girls (44.8 per cent) are impressed by high marks. The relatively small percentage of pupils giving affirmative answers really harmonizes with the psychological principle of great satisfaction in the consciousness of achievement, for, generally speaking, it is hardly likely that more than one-half of the pupils ever get marks that could be considered high.

*Does a high mark usually make you work harder?* There were 51.2 per cent of the pupils who answered this question affirmatively. This fact suggests the desirability of using high marks, perhaps even somewhat arbitrarily, for motivating a large percentage of the high-school pupils. As 53.6 per cent of the girls and 48.4 per cent of the boys answered affirmatively, it appears that the practice would be slightly more effective with girls than with boys.

*Do you like best those teachers who give you high marks?* It is not surprising that 51.2 per cent of the pupils answered this question affirmatively; it is remarkable that more of them did *not* do so. Practically one-third (32.2 per cent) of the pupils definitely declared that they do not like best the teachers who mark high. On the whole, the response does not greatly encourage teachers to use high marks for acquiring popularity with the great majority of pupils.



*When you get a low mark, do you ask yourself what caused you to receive it (for example, carelessness, poor preparation, unwillingness to recite)?* A strikingly large percentage (71.6 per cent) of the pupils answered this question affirmatively, a fact which seems to imply that low marks are very impressive to the great majority of high-school pupils. Comparing the response to this question with the response to the first question in this section, one is inclined to conclude that pupils are more responsive to low marks than to high marks. In this connection it is interesting to note that a larger percentage of the boys (79.2 per cent) than of the girls (64.9 per cent) give consideration to low marks; this fact might be considered corroborating evidence that high marks are more effective in motivating the girls. It is regretted that this investigation made no attempt to find out what pupils do to discover the causes of their failures and whether they get sympathetic advice from their teachers at such times.

*Does a low mark make you feel that you are a failure?* The fact that 46.1 per cent of the pupils answered this question affirmatively shows how very frequently low marks are discouraging. This is another argument for using high marks for motivation—not irrationally, of course. A larger percentage of the girls (48.3 per cent) than of the boys (43.6 per cent) seem to be discouraged by low marks.

*Does a low mark usually make you work harder?* Almost two-thirds of the pupils acknowledge that low marks increase their efforts. Low marks seem to be stimulating to a larger percentage of the boys (77.1 per cent) than of the girls (53.2 per cent). Does the increased effort resulting from low marks improve the quality of the pupil's work? Not certainly, by any means. It has been shown that low marks are discouraging. Discouragement is hardly a mental state conducive to the improvement of quality of output. Likewise, the mortality among the "failures" is further evidence of the impotence of low marks to enhance the quality or the quantity of the work of most pupils. These facts should give little comfort to the teacher who glories in the number of pupils he has "flunked."

*Would you work as hard on your studies if you received no marks at all?* The response to this question seems to be evidence of the pupils' sincerity in answering the questionnaire. Marks being as irksome as they are, here was a real temptation to give answers that

might result in the elimination of marks; yet we find 55.2 per cent of the pupils affirming that they would not work as hard if no marks at all were given, while only 39.4 per cent of them declared that they would. It seems reasonable to believe that the 39.4 per cent of the pupils who answered the question affirmatively are in school not to get marks but to respond to the intrinsic interest of the high-school curriculum; it would be interesting to know what proportion of these pupils have high I.Q.'s.

Considered together, the responses to the questions included in this section do not lead one to feel that marks should be entirely eliminated from school administration. They do, however, indicate that high-school pupils would not be greatly harmed if marks should be made to play a much less important rôle than they do at present.

#### MORAL AND EMOTIONAL EFFECTS OF REPORTS

The answers to the following questions are suggestive regarding the moral and emotional effects of reports on pupils. There is evidence, as has been stated elsewhere, that the pupils conscientiously answered the questionnaire. It is therefore believed that the responses discussed here are worthy of special consideration.

*Have you ever returned your report with your parent's (or guardian's) name forged?* Before the pupils answered this question, it was explained to them that the term "forged" signified "signing a parent's (or guardian's) name for the purpose of preventing him from seeing the report and of deceiving the school authorities into believing that it had been delivered to the proper person." This explanation was given in order to exclude the possibility of the pupils' regarding as forgery the signing of a parent's or guardian's name with his knowledge and permission. At the beginning of the questionnaire there appeared this statement: "You have noticed that YOU ARE NOT ASKED TO TELL YOUR NAME. Therefore, you can say *exactly* what you think, without the slightest chance of suffering any unfortunate consequences whatever." These precautions would seem to be conducive to frank, honest, truthful statements, and it is the conviction of the writer that the answers to this question are dependable. One of the principals declined to permit his pupils to answer the question. Of the pupils who answered it, 22.6 per cent

admitted that they had forged signatures; that is, approximately one pupil in five is guilty of the offense. Despite the request that they do not answer the question, 50.2 per cent of the pupils in the school of the objecting principal answered it; of these, 34.4 per cent confessed their guilt. The extent to which forgery prevailed varied considerably with the individual schools, the percentages being 3.3, 4.4, 9.0, 20.3, 34.4, and 34.6. Most likely, the moral atmosphere of the individual schools, their traditions, and the social status, parentage, and environmental conditions of the pupils themselves explain the variations. Sixteen seems to be the age at which forgery is most frequently practiced. Of the 438 pupils of this age, 163, or 37.2 per cent, admitted their guilt. When pupils of all ages are considered, girls (23.6 per cent) seem to be somewhat more addicted to the practice than are boys (21.3 per cent). It is regretted that no effort was made to determine the extent to which the confessions correspond with failures in school work. The evidence of this study seems to be that the matter of forging signatures to reports is the problem of individual schools rather than of schools in general; it also reveals the fact that the use of reports provides an appreciable temptation on the part of a considerable percentage of high-school pupils in general.

In order to discover their emotional response to reports, the pupils were asked to make the following statement express their feelings by drawing a line under the appropriate word or words: "When I receive my report, I am pleased, frightened, indifferent, made angry." It is evident that the results do not indicate a *constant* emotional response; in fact, such a response is not to be expected. Neither do the results reveal the *intensity* of the emotional reactions. Yet it seems reasonable to conclude that the girls especially, practically four out of ten (44.9 per cent), suffer considerable nervous strain because of the use of school reports. A much smaller percentage of the boys (28.8 per cent) claim that they are affected in this manner. Fifty-four and one-tenth (54.1) per cent of the pupils indicated that they are pleased on receiving their reports, 37.3 per cent that they are frightened, 21.0 per cent that they are made angry, and 15.9 per cent that they are indifferent.

*Does your report make you more interested in "passing" than in*

*mastering and enjoying the subjects you study?* This question was answered affirmatively by 55.8 per cent of the pupils. This fact suggests that the subject matter of the secondary-school curriculum and the methods of teaching employed do not arouse the interest of a majority of the pupils. It is also worthy of note that 61.4 per cent of the boys, as compared with 50.8 per cent of the girls, answered this question affirmatively. Is this due to the fact that the secondary-school curriculum makes a stronger appeal to girls than to boys or to the fact that the methods of teaching are more effective with girls than with boys because the majority of high-school teachers are women?

The effects of the use of high and low marks have been discussed in another section. It will suffice, then, to call attention to the fact that it was shown there that low marks make 46.1 per cent of the pupils feel that they are failures and that high marks make 51.2 per cent of the pupils work harder.

[To be concluded]

## A MODIFICATION OF THE DALTON PLAN

H. C. MASON

Superintendent of Schools, River Falls, Wisconsin

River Falls, Wisconsin, is a well-to-do community with a population of 2,272. There are three hundred pupils in the junior and senior high schools, of whom about one-third are tuition pupils from the surrounding territory. The school is somewhat handicapped as to adequate building accommodations, but the community has been generous in voting funds for current expenses. In the way of both equipment and teaching staff, the school ranks high when compared with schools in similar communities. The inspector from the state department of education places it in at least the upper 25 per cent in the state.

For a number of years the school has shown a well-developed school spirit, which has brought favorable comment from visitors from the state department of education and visitors from the University of Wisconsin as well as from its patrons. However, conferences with the teachers and the marks at the end of each six-weeks' period clearly demonstrated that something was fundamentally wrong with the general plan of instruction. On the basis of superficial observation, the outstanding discrepancies might have been stated as follows: (1) There was no definite plan for taking care of individual differences. (2) Most of the pupils were passive and seriously lacking in initiative and in self-direction. (3) There was no significant attempt to develop originality in the regular work. (4) The percentage of failures was higher than it should have been, and there appeared to be a growing tendency to lower standards to meet the needs of the increasing number of children who go to high school. These conditions were not noticeable to the casual visitor. There was excellent co-operation on the part of the pupils and the faculty. The school was making an unusual record in extra-curriculum activities. From the point of view of the conventional parent or high-school teacher, there was little to cause concern.

The results of mental and other standard tests given over a period of years and the application of a score card<sup>1</sup> recommended by a member of the state department of education convinced the members of the faculty that, while they were helping some pupils to develop in a very satisfactory manner, by far the greater number of pupils were not getting from their work the kind of training that would be the most useful to them. These were the problems in 1923-24.

Previous to that time a study had been made of the usual methods of taking care of individual differences, and it had been found that very few of the plans commonly used could be applied successfully to the situation or to the situation in any small high school. Sectioning on the basis of ability was found to be out of the question, because a sufficient number of sections could not be formed without materially increasing the cost of instruction. Even the sectioning of a comparatively small percentage of the classes on the basis of ability would have made it almost impossible to arrange a working program without lengthening the school day. A longer school day is quite impossible for the small high school with a large number of non-resident pupils, who drive or walk long distances during the greater part of the year.

For a time the condition was somewhat relieved by organizing "speed classes,"<sup>2</sup> by making special promotions, by allowing pupils to carry less or more than four subjects, and by organizing extra-curriculum activities designed to supply an opportunity for types of work not fostered in the regular classes, such as debating, dramatics, oratory, declamatory speaking, extemporaneous speaking, school paper, annual, camp-fire girls, booster club, parliamentary practice, and entertainments. In addition, there was a special study coach, who gave individual attention to accelerants, to pupils who were seriously deficient in their work, and to certain types of disciplinary cases that were particularly troublesome to the classroom teacher. While all these devices helped to relieve the situation, the faculty became convinced in time that they would not be able to accomplish what they had anticipated.

<sup>1</sup> J. T. Giles, "A Recitation Score Card and Standards," *Elementary School Journal*, XXIII (September, 1922), 25-36.

<sup>2</sup> The idea was taken from similar classes at Jackson, Michigan.



It was decided at this stage to make a study in faculty meetings of H. L. Miller's book on *Directing Study*, and, as a result, a plan was developed that seems to be rapidly taking care of the major difficulties.

Members of the faculty were aware that there are a number of plans of individual instruction, such as the Dalton plan and the Winnetka plan; but, while these were discussed to some extent, they were not adopted because they involve a rather complete break from the present classroom methods, and it seemed desirable to make the change gradual enough so that the teachers and the pupils could readily adjust themselves to it. It also seemed best to retain the good features of the old type of recitation.

After a study of Miller's book and of supplementary periodical literature, it was decided to introduce more socialized work into the classes. At first, this was difficult, but gradually the pupils assumed more responsibility, and it was not long before many classes were so well organized that the pupils used the hour in a profitable manner even if the teacher was not present.

While developing the socialized recitation, the teachers were given as much help as possible through assembly talks, parliamentary practice in the assembly room, and weekly teachers' meetings, where teachers were encouraged to discuss their problems with their fellow-teachers and with the superintendent. These meetings were very informal, and the teachers answered one another's questions or criticized opinions. Questions directed to the group were usually referred to some teacher who was either meeting the problem or attempting to meet it. This plan kept the work on a practical basis, and every abstract statement was illustrated with concrete facts from the classroom. When a teacher succeeded in carrying out some phase of the work particularly well, others were invited to visit her class. Occasionally a teachers' meeting consisted of a class demonstration by one of the more experienced teachers. This was usually followed by a discussion of the work. No special preparation was made for these class demonstrations. There was no attempt to make them perfect. The idea was to observe the work as it was actually carried on.

When the work of the school had been socialized to the point

where the plan was working successfully for the upper half of most of the classes, a few teachers began to make assignments modeled somewhat after those described by Miller.<sup>1</sup> These consist of blocks or units of work, each sufficient for from one to six weeks. Each block or unit is subdivided into other blocks or units and a mark assigned to each division.<sup>2</sup> Complete mastery is required in order to secure a mark in each unit. Our experience has taught that it is advisable to consider a mark of 90 as indicating complete mastery. The passing mark of the school is 75, and the completion of the first block entitles a pupil to that mark. The mastery of the next block entitles him to 80, the next to 85, and so on up to 95.

The first block of work in the assignment consists of the fundamental principles or the basic material of the assignment. The next block consists of simple problems or exercises applying these principles or basic facts. The third block may be further application or consist of gathering more details. The upper blocks consist of assignments designed to develop the pupil's imagination, judgment, and ability to think for himself and, as Miller would say, "to create."

During the early days of the assignment the work is carried on as usual, with the exception that it is socialized as much as possible. When principles are being taught, it is believed that the developmental lesson with the teacher in the foreground is a "hold-over" from the old system which it is desirable to preserve. In this part of the work the old question-and-answer type of recitation can be effectively and economically used. When the block is finished, those who have mastered it go on, while those who have fallen short of complete mastery continue to work at it. The classes become classes in supervised study, each pupil moving at his own rate until the whole assignment is finished by the number of pupils who should finish it according to the usual distribution of intelligences.

Of course, there have been some difficulties to overcome, and there are other problems to be solved, but sufficient progress has been made to justify the belief that more experience is all that is necessary in order to develop a satisfactory plan. The greatest

<sup>1</sup> Harry Lloyd Miller, *Directing Study*, p. 144. New York: Charles Scribner's Sons, 1922.

<sup>2</sup> This mark is arbitrary, like most marks given by teachers, but could be worked out so that it would be as reliable as any standard-test score.

difficulty at the beginning involved the checking of the work of the different pupils when they began to work on different units. The teachers were accustomed to the use of true-false and completion tests and found that they worked well for the early part of the assignment, where the purpose was to acquire facts. Problems, outlines, notes, and papers were used in subsequent blocks, and sometimes the amount of this work which the teacher had to correct was enormous. At first, some of the teachers considered this an insurmountable difficulty, but they soon found that it was not necessary to go over all the work of all the pupils. The examination of samples picked at random is just as effective and certainly just as accurate as are the results of a test, where the pupil is passed or failed on a few questions formulated by the teacher. There is some complaint that the plan requires more time than the old system. Undoubtedly, this is true the first time the subject is taught; but, if a record of the assignments is kept, this part of the work is materially reduced the second year.

In order to provide as much time as possible for the real business of teaching, an effort has been made to free the teachers from duties that are not absolutely necessary. The adoption of pupil self-government has relieved them of much of the burden of assembly-room periods. They are not called upon to make reports that no one uses, and there is no hall duty. Some of the teachers' meetings are conducted during the school day. During these meetings the pupils conduct their own classes, under the supervision of the acting-principal, who does not teach. A clerk is provided to make stencils, to run off mimeographed assignments, and to take care of report cards. Teachers understand that they are not expected to do either janitor work or clerical work that someone else can do and that their all-important business is to teach school.

Table I, which reports the marks of the pupils in a senior English class and of the pupils in a sophomore English class under both the old plan and the new plan, shows that, while the middle of the group get about the same marks, there are fewer failures and a larger number of high marks.

So far, the plan appears to have accomplished the following results: (1) It has made all the provision for individual differences

that it is believed can be made with the present course of study. (2) It is rapidly developing the student body into a working group of pupils with no upper limit set for their accomplishment. (3) It has reduced the failures in every class in which it has been tried. (4) It has reduced discipline problems by absorbing the "slack" that was certain to appear under the old plan.

No additions have been made to the faculty, and the expenses have not been increased in any way except perhaps for paper and a

TABLE I

	ASSIGNMENT IN AMERICAN POETRY IN SENIOR ENGLISH		ASSIGNMENT ON "SILAS MARNER" IN SOPHOMORE ENGLISH	
	Old Plan	New Plan	Old Plan	New Plan
Number of failures.....	7	.....	7	3
Number of marks from 75 to 80.....	18	26	5	7
Number of marks from 85 to 90.....	17	10	8	10
Number of marks from 95 to 100.....	.....	4	2	6
Total.....	42	40	22	26

little clerical assistance. Every pupil has all that he can do, and the slower pupils have an opportunity for complete mastery and the satisfaction that comes from work well done, a thing impossible for the slower pupils under the plan formerly used. If there are serious evils in segregation, they have been avoided. The whole school is gaining in self-control. All those who are at all capable are learning to plan and to execute and are discovering themselves as they had never done before. At present, there is more work for the teachers than there was under the old plan, but the teachers are agreed that a part of the extra work will be eliminated with experience, and they are willing to work harder if results are produced commensurate with the extra effort.

## Educational Writings

### REVIEWS AND BOOK NOTES

*The status of secondary education in Texas.*—In the educational surveys of the last decade the secondary school has usually been either overlooked or inadequately treated. The more recent surveys, however, have given more attention to the secondary field. An excellent example of this growing tendency is evidenced in the volume<sup>1</sup> devoted to secondary education in the report of the educational survey of the state of Texas.

The volume, the third in a series of eight, is divided into four chapters: "The Secondary School System of Texas," "The Junior High School," "The Junior College," and "The High School." More than one-half of the report is devoted to a study of the junior colleges of the state.

According to the findings of the report, facilities for higher education in Texas are not equally distributed; eighteen of the fifty-one state-approved colleges are located in six counties. Texas now has eighteen private junior colleges, four state junior colleges, and four municipal junior colleges. Considerable attention is given to a comparison of the courses offered in these institutions, the training of the teaching staffs, the standards of attainment, the physical plants, and the proximity to similar institutions. The four municipal junior colleges are studied in detail. The author makes specific recommendations for separate institutions and further recommends that the cost of establishment and maintenance of municipal junior colleges be divided between the community and the state, that the voters of a community approve the establishment of the institution, and that the number and location, as well as the standards of instruction, be controlled by the state.

Data presented indicate that the junior high school has not been generally accepted in Texas; of 275 superintendents answering a questionnaire, only twelve report junior high schools as parts of their school systems. Two reasons for this condition are given: (1) the seven-grade elementary school and (2) the fact that children are not admitted to the elementary school until they are seven years of age. There seems to be a lack of interest on the part of the citizens of Texas in this type of school. The junior schools of San Antonio are recommended to the school people for the study of junior high school procedure.

<sup>1</sup> C. H. Judd, *Secondary Education*. Texas Educational Survey Report, Volume III. Austin, Texas: Texas Educational Survey Commission, 1924. Pp. 104.

The status of the high schools of Texas is reviewed. The high-school teachers, on the whole, lack professional training and are poorly paid; the curriculum is of the traditional type, largely determined by college-entrance requirements; the instruction offered is inadequately supervised. More professional training for teachers and administrators, a revised curriculum, and better supervision are recommended.

The report is a valuable contribution to secondary education; the treatment of the junior-college movement, with a detailed analysis of the present situation in Texas, is presented in an objective manner. The recommendations made are worthy of the thought and consideration of educators throughout the country as well as of the school people of Texas. The analysis of the junior-college situation may well serve as a model for similar studies in other states.

W. G. KIMMEL

*Cultivating the creative capacities of children.*—From the Lincoln School of Teachers College, Columbia University, has come an exposition of significant educational experimentation,<sup>2</sup> which at once heartens and disheartens average workers in the field. The English department of that school apparently has succeeded in developing the creative spirit of high-school pupils in the production of what may really be called "literature." By suggestion, example, and the formation of a creative environment, Hughes Mearns draws out of adolescents their emotional reactions in very good poetic form. Mearns does not seek genius alone. He merely stimulates expression of thought in forms of beauty and seems to get results from average pupils in whom most teachers of English would see but meager possibilities. The finding of creative ability where none was dreamed of is the heartening story of *Creative Youth*. The poetic products of some of the pupils are admirable. Katherine Koswak, Tom Prideaux, and others are real creators. A second group of pupils are thoughtful critics, and a third group possess rather rare appreciation. Probably there is a fourth group whose literary productions do not find their way into the volume. The cultivation of creation, or of thoughtful criticism, or of appreciation would be worth while and would satisfy the average teacher, yet Mearns succeeds in cultivating them all.

*Creative Youth* is written in inspirational, almost poetic, prose. To a highly critical observer the book might read like *Arabian Nights*. Here is the disheartening feature. How does Mr. Mearns do it? He elaborates his methods in a most attractive way, and many of them may be helpful to the rank and file, but, after all, the reader is left with the impression that much of Mearns's success lies in his own personality and therefore is inexplicable. One concludes that Mearns himself is the creator of "Lincoln Lore." It is not intended to insinuate by this that the instructor has unduly improved the literary products

<sup>2</sup> Hughes Mearns, *Creative Youth*. Garden City, New York: Doubleday, Page & Co., 1925. Pp. xvi+234.



of his pupils; rather the feeling is that a most unusual teacher has touched the depths of creative ability in what is probably an average group of children. Both heartening and disheartening is *Creative Youth*. We need more such expositions of schoolroom accomplishments and fewer treatises on methods.

R. L. LYMAN

*Pupil activities in secondary schools.*—The literature of the junior high school has been enriched during the past two or three years by a number of books describing the manner in which some component of the junior high school idea has been worked out in a favorably known school. As indicated in an introductory note, the author of one<sup>1</sup> such book has the advantage which accrues from experience as principal of a junior high school and as associate superintendent in the Pittsburgh school system. His book is a well-mixed combination of the theory and practice of extra-curriculum activities. The successive chapters discuss the administration and supervision of extra-curriculum activities; describe the activities of a generous list of school clubs; offer justification and plans for pupil participation in the government of the school; establish the place of the assembly among the school's instructional devices; make suggestions for the proper control of social functions, school publications, and athletics; and set forth guidance as a necessary and feasible faculty activity.

The following brief quotations are typical of the spirit of the book. "In former years the teacher sought to control his pupils. The modern aim is to have the pupils control themselves" (p. 63). "Leaders do not necessarily come from among those of the highest I.Q.'s. They sometimes come from the most unsuspected sources" (p. 65).

The immediate aims of pupil participation in school government are said to be the development of self-control and self-reliance; the recognition and encouragement of initiative; the discovery and development of leadership; the development of co-operation, high ideals of citizenship, school spirit, ability to see the two sides of a question, sense of personal and group responsibility, and respect for law and order.

Lists of rules for the conduct of school social affairs are given in chapter vii. Chapter iv reproduces as concrete examples the student-government constitutions of the Latimer Junior High School, Pittsburgh; the La Junta Junior High School, La Junta, Colorado; and the Langley Junior-Senior High School, Pittsburgh. The chapter bibliographies are complete and well selected. The basic philosophies of the several activities are set forth in the form of "underlying principles," which are sometimes not so much principles as favorable arguments.

The book should be of material value to those engaged in secondary education. It should prove helpful to junior high school principals and sponsors of

<sup>1</sup> Charles R. Foster, *Extra-curricular Activities in the High School*. Richmond, Virginia: Johnson Publishing Co., 1925. Pp. xiv+222. \$2.00.

student activities, particularly to those about to introduce extra-curriculum activities. Definite, workable plans are presented, ready to be adapted to the situation at hand.

H. H. RYAN

BLEWETT JUNIOR HIGH SCHOOL  
ST. LOUIS, MISSOURI

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*Guiding the junior high school boy in the choice of a vocation.*—In his book, *The Boy and His Vocation*,<sup>1</sup> Mr. Sowers attempts to give the boy "a peep into the estate of manhood that will tend to give him vision and helpful ideas about such common things as work, character, thrift, health, and citizenship" (p. 3). He wishes the boy "to get a longer focal view of the matters of education and vocation than that at which the boy usually arrives until too late to profit by the knowledge" (p. 3) and hopes to awaken the boy "to the necessity of a training that will fit him not only for a vocation but for all the obligations of life" (p. 3). Mr. Sowers says that it is his object "to submit these things to the boy in language that he can understand and in such form that he can use the knowledge with profit now" (p. 3).

Chapter i, "The Boy on the Fence," shows the need of vocational guidance. Chapter ii, "Education," shows how education pays and how it is the one road to success. Chapter iii, "The Blazed Trail," deals in a most interesting manner with such topics as character and credit, starting right, the value of thrift, and the life-experiences of one hundred average men. Chapter iv, "Choosing a Vocation," shows the wastage of youth and the changed character of industry and gives a splendid account of how to choose a vocation. Chapter v, "Health and Efficiency," is an excellent discussion of the value of health and of its relation to efficiency. It holds out the great beacon light of hope that no boy need fail on account of physical handicaps. Chapter vi, "Citizenship," deals with two topics—what your government does for you and what you can do for your government. The last chapter, "Selling Your Ability," is devoted to information with regard to self-salesmanship in securing employment.

At the close of each chapter are exercises that are very helpful in the study of the text material. References are also given. The book is planned for use in the eighth and the ninth grades, and the material in it has been used as class lectures and talks to boys.

The style is clear, interesting, and gripping. The author has a pleasant way of "putting things over" and "driving them home." The material is brief and concise and can be understood by pupils at the level for which it is written.

C. G. VANNES

EVANSVILLE COLLEGE

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*Educational psychology in terms of original instincts and individual differences.*—During the past generation most of the writers in the field of educational

<sup>1</sup> John Irving Sowers, *The Boy and His Vocation*. Peoria, Illinois: Manual Arts Press, 1925. Pp. 198. \$1.50.

psychology have emphasized the original nature of man to the neglect of the social products of human intelligence. Human instincts, emotional concomitants of instinctive reactions, and individual differences have been discussed extensively in the orthodox educational psychology, while such fundamental social institutions as language, number, punctuality, politeness, and economic systems receive scant mention. A few books which explain social organization and individual human conduct in other terms than instincts have appeared recently, but they are in the minority.

Another treatment of the traditional type has come from the pen of a British writer.<sup>1</sup> The various chapters are a series of classroom lectures delivered in 1923-24 at Teachers College, Columbia University, when the author was acting as a visiting professor.

It is indicated that man's instincts will not in themselves enable him to survive, but, when directed and diverted, such tendencies may form the basis of an education which is demanded of the adult by the civilization and culture of the period. The general idea throughout the various chapters is to show how the human mind has evolved from the animal mind. Some discussions attempt to trace the ascent of intelligence from the instinctive level, and other discussions are concerned with the evolution of character. The chapters on instinct include such topics as heredity, man's instincts, play, and repression and sublimation of instincts. Discussions of the learning process describe the nervous system, maze experiments, the laws of learning, and methods of memorizing and acquiring skill. Chapters on mental life treat the problems of imagery, brain localization, the use of words in thought, symbols, transfer of training, individual differences, intelligence tests, achievement tests, general and special abilities, and the limit of intellectual growth. Certain non-intellectual topics are concerned with interests and prejudices and will and temperament differences.

The discussion of will and temperament does little more than mention the Downey tests and treats at some length the traditional classifications of temperament which are arrived at by observation. The author agrees that acquired characteristics or the social inheritance of the race are not matters of biological heredity but gives virtually no attention to the social institutions of modern life. In many respects his general line of thought follows rather closely that of Thorndike's *Educational Psychology*, particularly in the discussions of the laws of learning, the psychology of learning, and instincts.

In a large measure, the book presents the usual instinctive treatment of educational psychology. It includes a rather wide range of topics for adequate discussion within a single volume. The terminology is such as to be comprehended readily by the average undergraduate student at the senior-college level. The diction is at times popular and makes frequent use of everyday analogies and similes. The style occasionally approaches the literary, as illustrated by the

<sup>1</sup> Godfrey H. Thomson, *Instinct, Intelligence, and Character: An Educational Psychology*. New York: Longmans, Green & Co., 1925. Pp. 282. \$3.50.

titles of two chapters, "Pygmalion or Procrustes?" and "The Wings of Thought." The volume contains no bibliography or teaching aids. As a whole, the book offers little new material to the student of educational psychology.

CARTER V. GOOD

MIAMI UNIVERSITY

*Educating for character.*—The author of a recent volume<sup>1</sup> claims that it was written with a growing conviction of the need for a re-emphasis of moral values in the life of the nation. Its appeal is to parents, teachers, and their respective organizations, such as parent-teacher associations and reading circles. It is not a book of methods but a book of principles for moral guidance.

The book includes a short introduction dealing with aspects of morality and with the child mind. Part II is psychobiological and contains chapters on "The Original Ethical Data," "Bodily Conditions and Morals," and "Inheritance." Part III is psychological, containing chapters on "Thinking and Morals," "Desire, Interest, and Morals," "The Will and Morals," and "Suggestion and Imitation." Part IV is social and institutional, including chapters on "Character and Conduct," "Controls and Conduct," "The Home and Morals," "The School and Morals," "Non-Professional Educational Agencies," "Play, Work, and Morals," "Democracy and Education," and "Religion and Morals." The book is especially helpful to the student because of the list of references for further reading at the end of each chapter and because of the good index.

The volume is readable throughout. Although dealing with a subject that is both philosophical and psychological, the writer has the happy faculty of expressing himself interestingly, understandingly, and nearly always convincingly. While the reader who knows much of the field and the concepts of modern psychology will naturally get the most from the book, it may easily be read with both pleasure and profit by any teacher or parent who is willing to yield himself to instruction rather than to mere amusement. It deserves to have a large circle of readers, for its point of view is one in which parents and teachers generally ought to share.

The main thesis of the volume is the imperativeness of the development of moral character. The author not only maintains his thesis throughout the treatment but actually indicates the way by which character is to be progressively achieved by boys and girls in home and school.

J. O. ENGLEMAN

SUPERINTENDENT OF SCHOOLS  
TERRE HAUTE, INDIANA

*A school text in commercial law.*—The increasing complexity of modern social relationships, especially commercial relationships, makes it highly desirable that all be informed with regard to some of the more fundamental principles

<sup>1</sup> Herbert Martin, *Formative Factors in Character*. New York: Longmans, Green & Co., 1925. Pp. vi+346. \$1.40.

of law. There are times when a layman needs a skilled lawyer, but what he needs most is a knowledge of the law that will enable him to avoid litigation.

A recent text<sup>1</sup> discusses clearly a great many of the legal problems which a man of affairs is likely to encounter in the conduct of his business. Part I contains three chapters, which are devoted to a general discussion of the concept of law, its nature and enforcement. In the four chapters of Part II the law governing the ownership, use, and transfer of personal and real property is treated. Part III includes eight chapters on the general subject of contracts. Parts IV and V deal with contracts of a particular nature: sales, bailments, insurance, negotiable instruments, notes, bills, checks, employment, and principal and agent. Business organization is the subject discussed in Part VI, while Part VII includes a number of supplementary chapters, one of which is on interest and another on torts. The mechanical arrangement of the book is excellent. At the end of each chapter is a summary or a restatement of the subject matter in a form different from that of the original text. This is followed by a list of questions. Finally, a number of problems or hypothetical cases are given which test the ability of the student to apply principles to a given set of facts.

The author has selected the essentials of the law of business and has presented them plainly and clearly and, it may be added, briefly. He states what the law is without making any serious attempt to explain the more fundamental considerations which have led to the establishment of principles. Anyone who wishes to familiarize himself with the elements of the law governing business relationships would profit by reading the book. It should, moreover, meet the needs of those instructors of commercial law who are looking for a clear and lucid text.

I. N. EDWARDS

*A brief survey of business activities.*—It is generally agreed among leaders in present-day educational thought that pupils at the secondary-school level should be given guidance in the selection of a vocation. There is not complete agreement, however, as to how that guidance can best be provided. This lack of agreement is evidenced by the numerous and varied texts dealing with vocational guidance which have appeared from time to time. For the most part, these books are limited in scope in that they are concerned with detailed accounts of particular vocations or particular business activities. A broader approach to this problem might be made from the standpoint of the business world in general. This approach has been attempted in a book<sup>2</sup> which has for its field the study of business as a whole.

The purposes of the study may be stated briefly as follows: (1) to give

<sup>1</sup> Charles B. Cole, *Elements of Commercial Law*. Prepared under the editorship of Thomas Conyngton. Boston: Houghton Mifflin Co., 1925. Pp. xiv+384. \$1.48.

<sup>2</sup> William Marvin Jackson, *What Men Do*. New York: Macmillan Co., 1925. Pp. x+298.

young people generally a better understanding of the world of business, (2) to bring high-school pupils into closer touch with the business world about them, and (3) to aid young men and young women in choosing their vocations. The treatment may be characterized as being more concerned with supplying information about business structure than with providing vocational guidance.

The first five chapters of the book contain helpful suggestions as to how one may go about the selection of a vocation, the general or preparatory training necessary to success, and the opportunities in business for young people of the present day. These discussions deal with general matters only and have no reference to particular vocations. The next twenty-three chapters present in brief discussions a picture of the modern business structure. The more important activities of the business world are explained briefly, and the less important activities are named and classified in their various relations. Chapters xxix-xxxiv deal with the workers in business and are concerned chiefly with explaining the relations of individuals to the profession or business in which they are engaged. The last twelve chapters discuss the places of money and government as the instrumentalities which make business possible. By means of these discussions the book gives a general overview of the business world.

A unique feature of the volume is its organization. It is not planned as a textbook for class discussion but rather as reading material for pupils. Each chapter is brief and is followed by a set of instructions for observation and research. The observations made by the pupils in accordance with the instructions, rather than the text material, are recommended as the bases for class discussions.

A treatise of the type under review must, of necessity, be condensed in order to cover such a wide field. It could not attempt to give enough detail to acquaint the reader with any particular vocation. Its chief value for use in high schools, as here implied, is to supply reading material which will arouse interest and inculcate a desire for further study and observation.

J. M. McCALLISTER

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*A survey of week-day religious education.*—Although the secular tradition of the American public school does not favor the teaching of religion as a part of the curriculum, there is no valid reason for the neglect of the development of the religious aspect of a child's personality. For the most part, the task of religious training has been taken over by the home and the church; but, on the whole, the efforts of these institutions, especially those of the church, have until recently been desultory and inadequate. Thoughtful students of modern life are beginning to recognize the fact that the wholesome nourishment of the religious interest cannot be left to the futile method of "fumble and find," which characterizes the usual attempt at religious education. As a consequence, within the past fifteen years there has arisen extraordinary concern over the problem of systematic religious instruction. One very patent outcome of this interest is the unusual growth of the week-day church school, and a recent



report<sup>1</sup> covering the present status of this institution is a matter of considerable importance to the student of education.

At the outset, the author of this report distinguishes the week-day church school from the daily vacation church school, the parochial school, the teacher-training school, and Bible study for credit in the high school. The week-day church school provides religious education on regular school days outside or during regular school hours. The church-school term is usually co-extensive with the public-school term. The classes are usually conducted in public-school buildings, churches, or community houses under denominational or inter-denominational auspices. Instruction is given by public-school teachers, pastors, Sunday-school teachers, or volunteer teachers and is supervised oftentimes by public-school authorities.

The fact that thirty-three states have already established the week-day church school indicates an almost country-wide interest in this new institution. It is therefore very appropriate that this survey had for its object an intensive investigation of the present status of the week-day church-school movement. For this purpose the author selected 109 schools from fifty-two representative localities and spent five months in actual field work involving ninety-eight hours of class visitation. He filled in data schedules for each of the schools. The schedules consisted of an extensive questionnaire covering the important phases of the work of the week-day church school. They were drafted, submitted to a number of experts in religious education for constructive suggestions, revised, tried out in a number of schools, and revised again before they were employed in the survey. The technique of this study, then, consisted of expert observation based on carefully prepared data schedules. The same person constructed the schedules, conducted every observation, and made every interpretation. This constant factor eliminates many of the questionable features of the schedule technique of surveying. The reliability of such a study depends on the caliber of the observer and the character of the schedules. It happens that the author is an expert in the field of religious education, and the investigation was constantly under the supervision of the department of religious education of Northwestern University. In view of these conditions, it is plausible to conclude that there is a considerable degree of reliability in the conclusions which are drawn from the survey.

After a historical review of the week-day church school and a preliminary statement of technique, the report deals with an analysis of the results yielded by each section of the schedules. In the first place, the survey indicates a wide variety of objectives for the week-day church school, but it is generally agreed that the development of character should receive the greatest attention and that the Bible should constitute the major part of the course of study. The report also indicates that the physical equipment and the materials of instruc-

<sup>1</sup> Philip Henry Lotz, *Current Week-Day Religious Education*. New York: Abingdon Press, 1925. Pp. 412. \$2.00.

tion are very inadequate and that the teachers are very poorly trained for religious instruction. On the other hand, there is much evidence of good attendance and exceptional interest on the part of the pupils and of a splendid spirit of sympathy and co-operation on the part of both the public-school authorities and the parents. One conclusion which is very important for the future of the week-day church school is that at practically every point the interdenominational church school is much superior to the denominational church school. On the whole, the survey indicates that, while the week-day church school is not on a par with the public school, it is so far in advance of the work of the customary Sunday school that it gives promise of splendid development in the immediate future. It does not seem to be too extravagant to prophesy that the next decade will witness a formidable expansion of the week-day church school, which will be of significance not only for the organized church but also for the public school.

Inasmuch as public-school authorities have had, and will continue to exert, a great deal of influence on this new institution and since the progress of this movement will depend to a large extent on the co-operation of the principal, the superintendent, and the teacher, this survey of the status of week-day religious education should be of genuine interest to workers in the field of public education. The field of religious education has begun to assume such proportions that no educator can ignore it. Whether we like it or not, those of us who are primarily concerned with public education will soon be compelled to recognize a movement which has prodigious significance for the welfare of society.

UNIVERSITY OF MICHIGAN

HOWARD Y. MCCLUSKY

*A manual of statistics.*—In the present stage of educational statistics in this country, a new text should be justified on the ground of furnishing either a superior organization of material or a contribution in the field of practical applications. In the opinion of the reviewer, a recent text<sup>1</sup> meets neither of these conditions more than halfway. The book is not notably successful in its presentation from the point of view of the beginner; nor does it contribute a great deal to the availability of material for either the beginning student or the advanced student. As for original contributions to theory, none were observed.

The first part of a text to be used by students just entering a new field of work is of great importance. The student's initial contact does much to determine his permanent attitude toward the work, and it is the first part of this text that seems to be the poorest. The reviewer wonders whether the beginner will get from the first chapter, which deals with tabulation and classification, any practical working notion of a frequency distribution. In telling how to make a distribution, the author devotes eleven pages to technical and relatively abstract description and definition before he gives the reader any concrete idea

<sup>1</sup> C. W. Odell, *Educational Statistics*. New York: Century Co., 1925. Pp. xviii + 334. \$2.50.

of a frequency distribution. Why not begin by giving the student some clear-cut ideas of what the new device is and what it is used for rather than by writing a chapter that is to serve as a reference section to cover all the technical points with regard to classification which may come up during the course? Through what sort of mental gymnastics is the beginning student expected to go when the author, in true academic style, treats of tabulation in the first section and of classification in the third section and then in a footnote calls attention to the fact that the two procedures have something in common?

Similarly, in the second chapter, apparently in order to make the subject of graphs an academically logical unit, the author introduces and treats of the normal curve at some length, employing a number of concepts (sigma, median deviation, etc.) about which the beginning student knows nothing and which are not developed in the text until later. Why was such material not placed later in the book, after the concepts necessary for its understanding had been built up and where, by all practical forms of logic, it belongs? When will college texts be written with some semblance of the regard for the student's background and concept-development that educators are demanding of high-school texts?

After the author gets well started, the discussion runs on more smoothly and coherently. The material on averages, variability, correlation, etc., follows the customary treatment, receiving some individuality through the author's descriptions and examples. In general, these chapters are well written. They give detailed explanations and illustrations of the principles as introduced and draw from the literature a fairly wide range of applications. The text is probably better, on the whole, than its predecessors, and several years ago it would have been greeted as valuable. At the present time it does not represent a landmark in progress.

The physical makeup of the book, while not intrusively unsatisfactory, could be improved. The number and distribution of headings, the typesetter's work on the references introduced into the body of the text, the lack of titles and column headings for numerous illustrative examples, all constitute one of those frequently unanalyzed, but definitely contributing, factors in the vagueness with which the reader often grasps at the author's meaning.

DOUGLAS E. SCATES

*A philosophy of general methods written in direct discourse.*—The field of general methods has been very well canvassed within the past decade. At both the elementary-school level and the secondary-school level there are carefully prepared books which should prove serviceable for some years to come. Probably in the field of special methods there are opportunities for further contributions to the solution of teaching problems.

A somewhat unusual approach<sup>1</sup> to the problem of methods, written in direct

<sup>1</sup> William Heard Kilpatrick, *Foundations of Method: Informal Talks on Teaching*. New York: Macmillan Co., 1925. Pp. xii+384.

discourse and emphasizing the philosophical aspects of education, aims "not to present details of specific method procedures but rather to discuss the principles on which method in general may be founded" (p. vii).

An introductory chapter and two later chapters emphasize the "wider" problem of method. This wider problem is concerned primarily with the building of attitudes and appreciations rather than with the teaching of specific subjects, such as spelling and silent reading. Six chapters are devoted to treatments of learning. Thorndike's S-R bond and laws of learning are discussed in some detail; the neural basis of behavior is explained. Coercion in connection with learning is treated at length. In general, coercion is undesirable, but in certain instances it may be the only alternative left to the teacher. Three chapters are concerned with the problem of interest; two chapters discuss thinking. The author points out in three chapters the need for the reorganization of the curriculum. The complexity of modern society creates a demand for the enrichment of the curriculum and the modification of teaching methods. The psychological arrangement of subject matter is advocated. Two chapters present a treatment of moral education. A final chapter discusses certain miscellaneous topics, such as the project method, ideals, individualized work, standard norms, textbooks, and minimum essentials.

The author has been materially influenced by Thorndike's educational psychology and by Dewey's philosophy of education. The direct form of discourse seems to involve considerable circumlocution and does not lend itself to a very systematic arrangement of the topics treated. The book is a somewhat philosophical discussion of general principles of teaching rather than an organized treatment of concrete factual material relating to specific school subjects and problems. Unquestionably, the author performs a service by indicating the need for emphasis on the broader aspects of education, such as attitudes, habits, skills, and appreciations; too frequently the teacher loses sight of such values under the constant pressure of teaching facts, textbook material, and subjects.

CARTER V. GOOD

MIAMI UNIVERSITY

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